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ROY F. WESTON, INC.

**SITE ASSESSMENT REPORT
FOR
SYBILL, INC.
DETROIT, WAYNE COUNTY, MICHIGAN**

**SITE ASSESSMENT REPORT
FOR
SYBILL, INC.
DETROIT, WAYNE COUNTY, MICHIGAN**

Prepared for

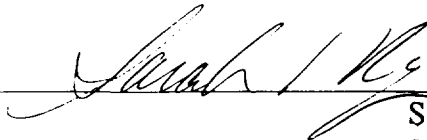
U.S. Environmental Protection Agency
Emergency and Remedial Response Branch
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by

Weston Solutions, Inc.
750 East Bunker Court, Suite 500
Vernon Hills, Illinois 60061

November 2002

Prepared by

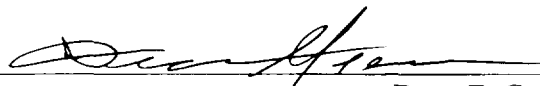


Sarah L. Meyer
START Associate Project Scientist

Date

11/22/02

Approved by



Dean F. Geers
START Program Manager

Date

11/22/02



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22 November 2002

Mr. Brian Kelly
On Scene Coordinator
U.S. Environmental Protection Agency
Region V
9311 Groh Road
Gross Ile, MI 48138

TDD No.: S05-0209-005
DCN: 309-2A-AC0J

Subject: Sybill Inc. Site
Site Assessment Report, Revision 0

Dear Mr. Kelly:

Weston Solutions, Inc. (WESTON®) is pleased to submit one copy of the Site Assessment Report, Revision 0, for the Sybill Inc. Site in Detroit, Michigan.

Should you have any questions or require additional information, please feel free to contact me at (312) 424-3303.

Very truly yours,

WESTON SOLUTIONS, INC.

A handwritten signature in black ink, appearing to read "Sarah Meyer", with a long, sweeping horizontal line extending to the right.

Sarah Meyer
Associate Project Scientist

cc: Gail Nabasny, START Project Officer, U.S. EPA, Region V (SE-5J)
Kevin Axe, START Project Manager, WESTON
site files



**SITE ASSESSMENT REPORT
FOR
SYBILL, INC.
DETROIT, WAYNE COUNTY, MICHIGAN**

Prepared for

U.S. Environmental Protection Agency
Emergency and Remedial Response Branch
Region V
77 West Jackson Boulevard
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Date Prepared	22 November 2002
TDD Number	S05-0209-005
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Document Control Number	309-2A-AC0J
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START Project Manager	Kevin Axe, P.G.
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U.S. EPA On-Scene Coordinator	Brian Kelly

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LIST OF ABBREVIATIONS AND ACRONYMS

AST	Aboveground Storage Tank
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
DWSD	Detroit Water and Sewerage Department
EL	Engineering Labs, Inc.
°F	degrees Fahrenheit
FRP	Facility Response Plan
GM	General Motors, Inc.
LEL	lower explosive limit
MDEQ	Michigan Department of Environmental Quality
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
NCP	National Oil and Hazardous Substances Contingency Plan
OPA	Oil Pollution Act
OSC	On-Scene Coordinator
PCBs	polychlorinated biphenyl compounds
POTW	Publicly Owned Treatment Works
PPE	personal protective equipment
RCRA	Resource Conservation Recovery Act
SPCC Plan	Spill Prevention, Control and Countermeasures Plan
START	Superfund Technical Assessment and Response Team
SVOCs	semivolatile organic compounds
Sybill	Sybill, Inc.
TCLP	Toxicity Characteristics Leaching Procedure
TDD	Technical Document Directive
ug/kg	micrograms per kilogram
U.S. EPA	United States Environmental Protection Agency
USC	United States Code
VOCs	volatile organic compounds
WESTON	Weston Solutions, Inc.

SECTION 1

INTRODUCTION

On 22 October 2002, United States Environmental Protection Agency (U.S. EPA) On-Scene Coordinators (OSCs) Ross Powers and Jeffrey Kimble and the Weston Solutions, Inc. (WESTON®) Superfund Technical Assessment and Response Team (START) completed a site assessment at the Sybill Inc. (Sybill) site, located in Detroit, Wayne County, Michigan. The site assessment activities were conducted under Technical Document Directive (TDD) S05-0209-005. The analysis of the samples collected during the site assessment was completed under TDD S05-0210-003.

1.1 OBJECTIVES AND SCOPE OF SITE ASSESSMENT

The objective of this site assessment was to gather information to characterize the current on-site environmental concerns the presence used oil, hazardous waste, and unknown substances poses. This site assessment was also completed to evaluate the need for further investigation or removal action. Specific objectives of the site assessment are as follows:

- Determine the nature of the contents of selected on-site aboveground storage tanks (ASTs);
- Determine the nature of the contents of selected on-site laboratory containers;
- Determine the nature of the contents of selected on-site drums and totes;
- Estimate the total volume of waste oil and potentially hazardous waste on-site;
- Determine the related potential threats to human health and the environment, and

- Evaluate the need for further site characterization, remediation, or removal.

To accomplish these objectives, the site assessment activities consisted of collecting samples from on-site ASTs, laboratory containers, drums and totes selectively analyzing the samples for organic and inorganic parameters and characteristics of used oil and hazardous waste.

1.2 REPORT ORGANIZATION

This site assessment report is organized into the following sections.

Section 1: Introduction – The Introduction provides a brief description of the objective and scope of the site assessment activities.

Section 2: Site Background – A site description, the site history, and a summary of previous investigations is provided.

Section 3: Environmental Investigation Procedures – The Environmental Investigation Procedures section describes the methods and procedures used during the site assessment activities.

Section 4: Environmental Investigation Results – The Environmental Investigation Results section describes the results of sample analysis.

Section 5: Characterization of On-Site Waste – This section provides a discussion of the difference between waste oil and hazardous waste streams on-site and the application of Oil Pollution Act (OPA) and Comprehensive Environmental Response, Conservation and Liability Act (CERCLA) regulations.

Section 6: Threats to Human Health and the Environment – Conditions that warrant a removal action under the National Oil and Hazardous Substances Contingency Plan (NCP) are identified.

Section 7: Conclusions and Recommendations – The findings of the site assessment activities are summarized and recommendations for further activities are provided.

Section 8: References – The References section provides a list of references utilized in compiling the report.

2.2 SITE HISTORY

At one time, Sybill functioned as a water treatment facility for the City of Detroit. The facility eventually began to function as a used oil processing plant, filling the on-site ASTs and clarifiers that were designed for water treatment with oil and waste products from local industry. During operations as a used oil processing facility, Sybill was sited with various regulatory violations and had many difficulties with the Detroit Water and Sewerage Department (DWSD) and Michigan Department of Environmental Quality (MDEQ).

In addition, in June 2001, city-issued operating permits were eventually revoked, and all utility services were terminated due to regulatory violations. The City of Detroit has reported that on-site drains discharging to the municipal sewer system had been "plugged up" to halt all contributions to the Publicly Owned Treatment Works (POTW) or storm sewers from Sybill. However, Sybill continued to receive waste oil even after the utilities had been disconnected. Sybill stockpiled waste in all of the available on-site containers and tanks until the end of August 2001. Once the waste storage capacity of the facility was reached, Sybill management filed for bankruptcy and abandoned the facility. During operations, the facility was owned and operated by Mr. William Madeus.

General Motors, Inc. (GM) reportedly contributed 70% of incoming waste to the site during its operation as a used oil processing facility. As a potentially responsible party (PRP) for the environmental conditions at Sybill, GM contracted Engineering Labs, Inc. (EL) to perform remedial activities at the site after the facility was abandoned. EL has estimated that the facility had been storing approximately 2 million gallons of waste oil prior to removal GM's efforts. EL has also reported that as of May 2002, approximately 400,000 gallons of waste oil remain on-site.

2.3 PREVIOUS ENVIRONMENTAL INVESTIGATION

On 10 and 13 May 2002, U.S. EPA and START investigated the Sybill property as part of an investigation into the River Rouge oil spill that occurred in early April 2002. U.S. EPA and START sorted through paperwork that was left in the abandoned office building, visually inspected ASTs, drums, totes, sewers, and containment areas and also documented site conditions. Used oil fingerprint samples were collected in an effort to determine if the oil being stored on-site matched oil spilled in the River Rouge. According to both the U.S. EPA's Emergency Response Team (ERT) and the United States Coast Guard (USCG) Marine Safety Laboratory (MSL), the samples did not match the spill material. However, conditions noted on-site during this investigation were suspected to be a threat to human health and the environment; therefore, the May 2002 investigations led to the October 2002 site assessment documented in this report

The results of the records search at Sybill's abandoned offices yielded information about the facility operations. An outdated copy of the facility's Spill Prevention, Control, and Countermeasures (SPCC) Plan was located, but no Facility Response Plan (FRP) was found. Direct information concerning on-site tank contents was not available. Documents reviewed on-site revealed the following permit violations and regulatory agency site visits for Sybill:

- 1) The City of Detroit issued Sybill nine volume and effluent violations for wastewater discharge from 2 September 1999 through 11 August 2000.
- 2) The U.S. EPA performed a facility audit at Sybill on 28 March 2000.
- 3) On five separate occasions from 29 March 2000 to 7 April 2001, W. Goeddeke of the Wayne County Division of Air Quality visited Sybill in response to odor complaints from neighboring properties or to conduct site inspections.
- 4) The Wayne County Division of Air Quality issued Sybill at least one violation. The date of this citation is unknown.

Other notes regarding facility operations were found in a logbook kept by a Sybill employee. In the logbook, odor complaints from surrounding neighbors were noted on 12 separate occasions between 15 September 1999 and 29 March 2000. The entry from 18 September 1999 indicated that the complainant said the odors smelled like "burning meat." A note in the logbook dated 23 November 1999 stated that SRS, Inc. (currently known as Sybill) "has been accepting rancid anaerobic material that has been rejected" by other facilities.



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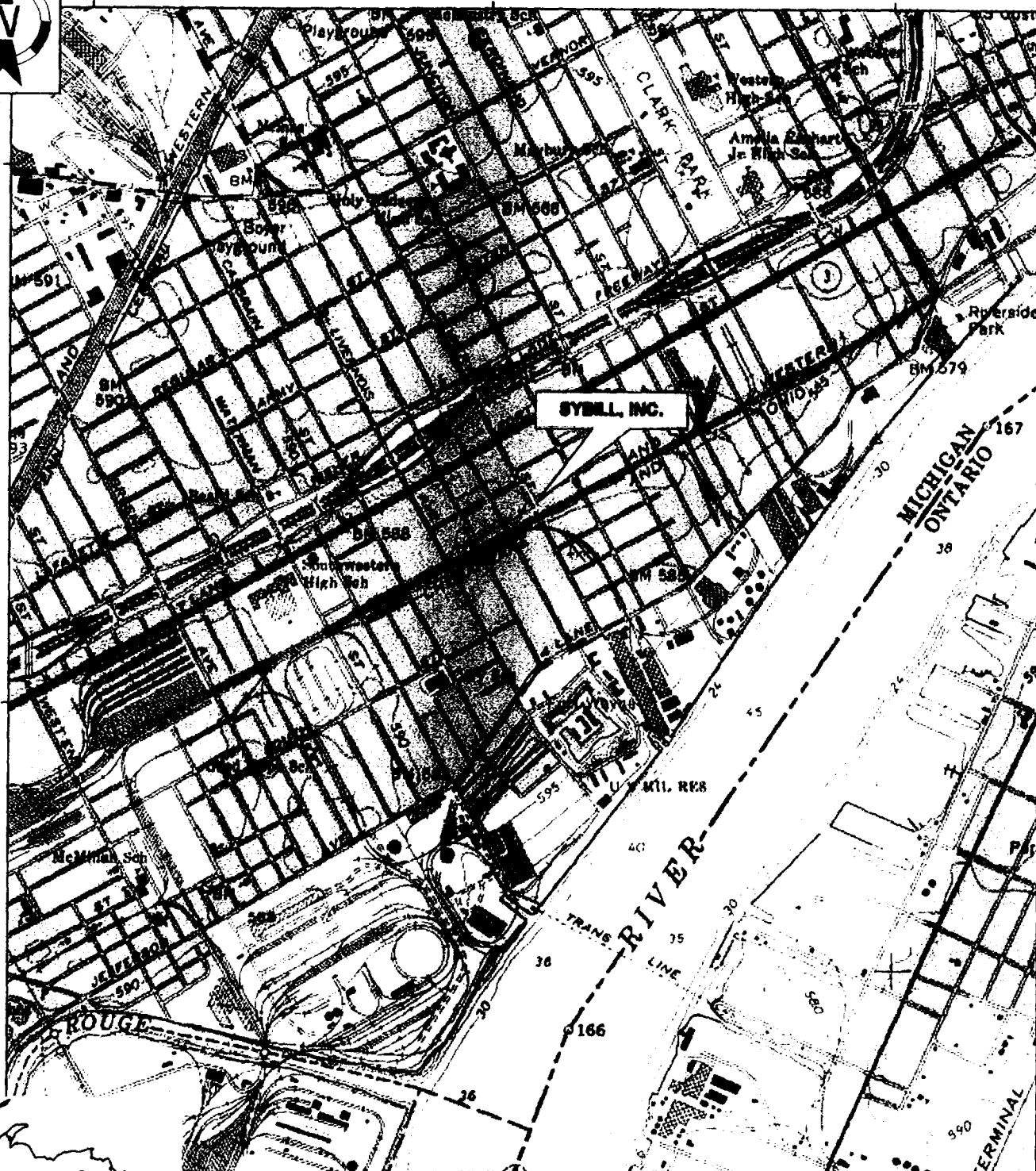
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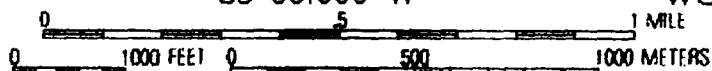
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DETROIT

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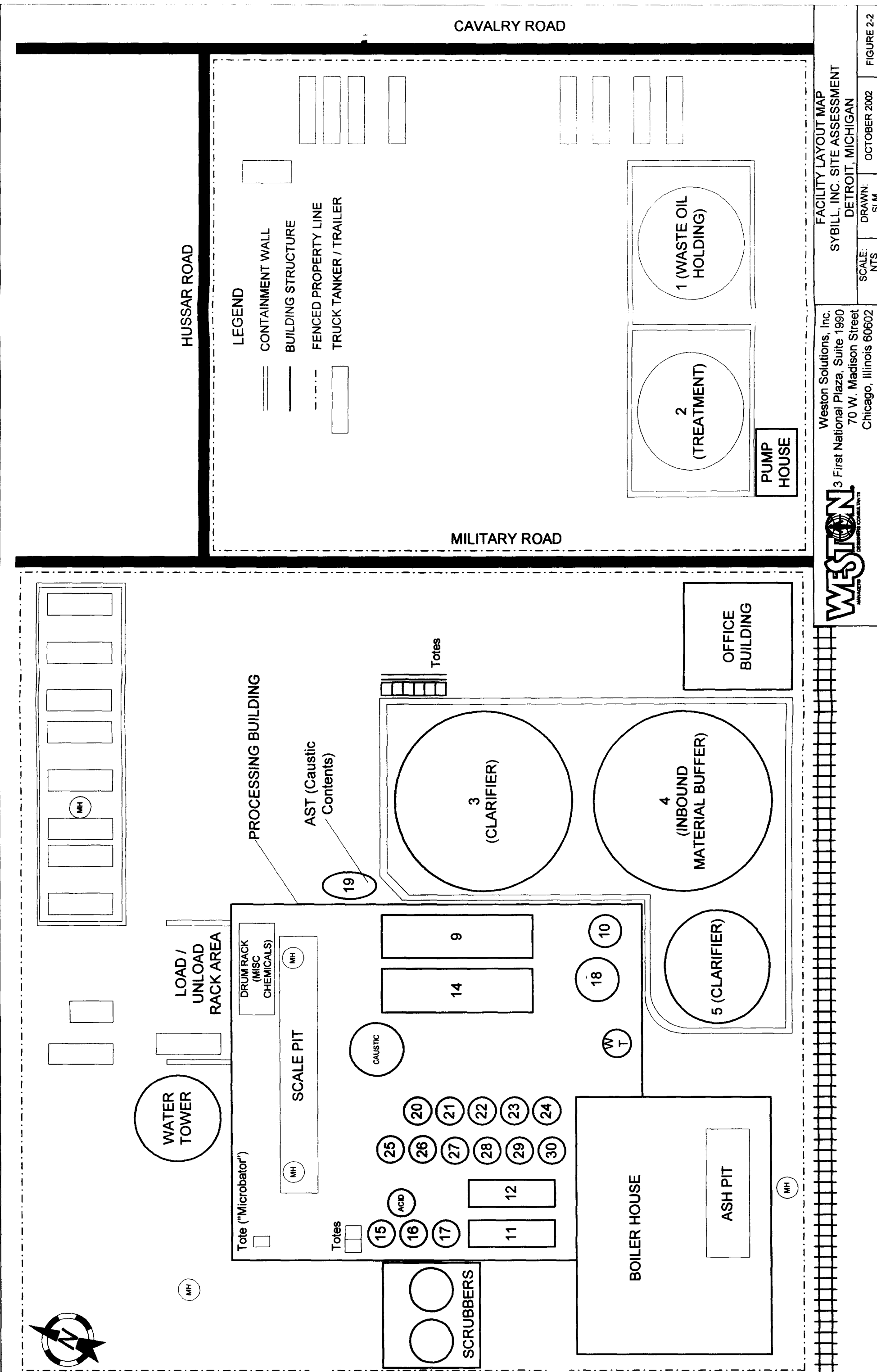



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Chicago, IL 60602

TOPOGRAPHIC SITE LOCATION MAP
SYBILL, INC.
DETROIT, MICHIGAN

OCTOBER 2002

FIGURE 2-1





WESTON
MANAGED
ENVIRONMENTAL CONSULTANTS

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70 W. Madison Street
Chicago, Illinois 60602

FACILITY LAYOUT MAP
SYBILL, INC. SITE ASSESSMENT
DETROIT, MICHIGAN

SCALE: NTS
DRAWN: SLM
OCTOBER 2002
FIGURE 2-2

SECTION 3

ENVIRONMENTAL INVESTIGATION PROCEDURES

On 22 October 2002, WESTON START personnel conducted a site assessment of the Sybill property to collect both used oil and waste samples as well as field data to establish if hazardous materials were present. If present, analytical data would help to determine if the hazardous materials posed a significant threat to human health or the environment. Site investigation personnel included OSCs Ross Powers and Jeffrey Kimble (U.S. EPA) and Sarah Meyer, Daniel Capone, and Ray Moffett (START). Also on site during the investigation were James Ferritto, Jr. of MDEQ and LaReina Reit of the City of Detroit. Specific site assessment observations and activities are detailed below.

3.1 SITE CONDITIONS

At the time of this assessment, access to the site was unrestricted. A chain-link and barbed-wire fence surrounds both portions of the site; however, breaks in the fence and numerous unlocked gates allowed access at multiple locations. The gate at the pump house (Appendix A, Photo #3), the gate to the alley between the railroad tracks and the boiler house (Appendix A, Photo #4), and the gate that accesses the north corner of the process building parking area (Appendix A, Photo #5) were not secured. In addition, the doors to the office building and boiler house were not secured. OSC Powers secured all access locations with padlocks upon the completion of the site assessment.

Signs of vandals and trespassers were evident in all areas of the site. At numerous locations inside the office and process buildings, doors and windows were broken or pried open, and piles of stripped wiring covered areas of the floors (Appendix A, Photo #6). Files, papers, and chemical bottles that had been inside cabinets or drawers during the May 2002 site inspection were scattered about the office building and upstairs laboratory (Appendix A, Photos #7 and 8). Likewise, the office furniture

was in disarray. Trash and debris in the boiler house such as clothing and hair products were also evident (Appendix A, Photo #9).

The general condition of the on-site buildings and structures was poor. In particular, the roof and walls of the process building and the windows and doors of the office building and boiler house have lost structural integrity or were broken or crumbling. The failing rooftop of the process building may have allowed rainwater to contribute to the pools of standing liquid (field test pH = 7) on the floor near the scale pits. Various drums and totes were resting on the floor in this standing liquid.

Only a few of the on-site containers were labeled. One drum located in the process building was labeled "Tergitol," which may be a detergent trade name (Appendix A, Photo #10); another drum was labeled as hydrogen peroxide. Two drums outside the pump house were labeled as sodium hypochlorite and an unknown oxidizer. A drum inside the office building was labeled as hexane and had an operational hand pump installed at the top of it, offering easy access to the liquid contained within the drum. A tote in the process building had a hand-written marking on it that read "Microbator." Another tote in the area of the loading dock to the office building was labeled "Rec Oil, flammable" (Appendix A, Photo #11). Approximately ten to fifteen 20-pound bags of a substance that was labeled as "Amberlite" was being stored in the boiler house basement (Appendix A, Photo #12). This appeared to be an absorbent substance. In addition, numerous compressed gas cylinders were scattered throughout the office building and the basement of the boiler house (Appendix A, Photos #13 and 14).

The general condition of on-site drums and containers was poor. Many metal drums were rusted and had product crystals or residue surrounding the bung. Few of the drums had any markings or labels (Appendix A, Photos #10, 15, 16, and 17). AST 19, a set of pumps in the basement of the process building, and the caustic soda AST inside the process building had access valves that were also encrusted with product crystals (Appendix A, Photos #18, 19 and 20). Likewise, many ASTs, such as the clarifiers (ASTs 3, 4 and 5) and their access catwalks and enclosures, were heavily rusted.

However, ASTs 1 and 2 appeared to be in good condition, and the access stairways and railings were solid, as was determined when investigation team mounted the stairways during tank sampling.

Many on-site secondary containment areas showed evidence of spills or releases from the original containers or from the secondary containment itself. The secondary containment around the clarifiers appeared to contain oily, discolored water (Appendix A, Photo #21), and staining of adjacent cement was observed. A breach of this containment and subsequent staining of ground outside of the containment wall was noted (Appendix A, Photo #22 and 23). Standing oily water was also noted inside the containment areas of ASTs 1 and 2 (Appendix A, Photo #24).

Other unknown or potentially hazardous materials scattered about the site included the following:

- Unlabeled totes that were staged at the loading dock area near AST 5 (Appendix A, Photos #11 and 25);
- The scale pit in the process building that was filled with oil and sludge (Appendix A, Photo #26);
- Approximately 10 to 12 box and tanker trucks parked on-site with largely unknown contents;
- A derelict tanker truck that had leaked oil and was parked in the parking area adjacent to ASTs 1 and 2 (Appendix A, Photo #27).

An inventory of waste oil on-site is provided in Table 3-1, and an inventory of potentially hazardous waste other than waste oil is presented in Table 3-2.

Several areas on-site posed threats of spilled material that could migrate off-site:

- Evidence of a historic oil spill was found between two tanker trucks in the on-site parking area near a sewer manhole (Appendix A, Photo #28).

- A sump in the floor of the pump house was clogged with oil (Appendix A, Photo #29), and a thick layer of oil covered the entire pump house floor.
- AST 19 did not have secondary containment. It contained a substance that field tests confirmed was corrosive (SI-field screen-08, pH = 14) and was located close to a sewer manhole (Appendix A, Photo #30).
- The secondary containment surrounding the six totes that are located along the loading dock to the office building appeared to be insufficient as a past release was evidenced by dark staining on the driveway closest to the building. Releases from the secondary containment could migrate toward a nearby manhole (Appendix A, Photo #25).
- The secondary containment wall of AST 5 had a pipe protruding from the wall approximately 8 inches above the level of oily water in the containment. The nature of this pipe was unknown. It is also unknown if this pipe has acted as a pathway for the contained materials to migrate off-site (Appendix A, Photo #31).
- The ash pit located in the boiler house contained oil, oily water, and sludge. A higher liquid level was present at the time of U.S. EPA's and START's May 2002 site visit than was present at the time of the October 2002 site assessment (Appendix A, Photo #32). It is unknown how the liquid level in the ash pit diminished over time.
- In the alley between the doors to the boiler house and the railroad tracks, a manhole is located in a depression that contained shallow, standing water, possibly from a recent rain. The mechanism for drainage of this area is not known.

Air monitoring conducted on-site during the assessment indicated that organic vapors were limited to inside containers such as drums, totes, and tanks. Most of the site, both indoors and outdoors, is very well ventilated.

3.2 SAMPLING ACTIVITIES

During the site assessment, START collected six investigative used oil samples and one duplicate sample and seven investigative waste product samples and one duplicate sample. START also conducted field screening at eight other locations. Tables 3-3 and 3-4 describe the samples taken and the field screening results for used oil and waste products, respectively. See drum logs and

sample forms in Appendices B and C, respectively, for more details on samples, containers, and conditions. Sample locations are shown on the facility map in Figure 3-1.

Before sampling began, U.S. EPA and START conducted a site reconnaissance to identify potential sampling locations. At that time, a radiation survey and ambient air monitoring were conducted with a Ludlum radiation probe and a MultiRAE five-gas analyzer, respectively. There were no ambient air readings above background for volatile organic carbon (VOC), hydrogen sulfide, or carbon monoxide vapors or the lower explosive limit (LEL). There were no readings above three times the background level of radiation during the site reconnaissance. All buildings and sampling areas were screened. Air monitoring continued throughout the sampling process to ensure that the appropriate level of personal protective equipment (PPE) was used during sampling activities.

During the 22 October 2002 site activity, a total of seven used oil samples were collected for analysis (SI-TOT-02, SI-TOT-02DP, SI-TA2-01, SI-TA2-02, SI-CLA-01, SI-ASH-01 AND SI-SCP-01), and eight waste product samples were collected for analysis (SI-DRM-01, SI-TOT-01, SI-TOT-01DP, SI-LAB-01, SI-LAB-02, SI-LAB-04, SI-LAB-05 and SI-TAC-01).

Following the site reconnaissance, START dressed in Level B PPE for unknown drum, tote, and container sampling in the process building, the loading dock area, office building and laboratory (Appendix A, Photo #33) (samples SI-TOT-02, SI-TOT-02DP, SI-DRM-01, SI-TOT-01, SI-TOT-01DP, SI-LAB-01, SI-LAB-02, SI-LAB-04, SI-LAB-05 and SI-TAC-01). Drum thieves and scoops were used for sampling or material from the source container was poured directly into the sampling container. The sample of hexane from the 55-gallon drum on the first floor of the office building was collected using the attached hand pump. All samples were labeled at the time of collection.

Modified Level D PPE was used to sample the on-site tanks, sumps, and pits (SI-TA2-01, SI-TA2-02, SI-CLA-01, SI-ASH-01 AND SI-SCP-01). Samples from the scale pit, ash pit, clarifier, and the surface layer oil in AST 2 were all collected using a dedicated dipping jar tied to a string. After the

sample was collected, it was transferred to a laboratory-prepared sample jar and labeled. The subsurface sludge layer in AST 2 was sampled through the top access hatch using a clean 4-inch bucket auger attached to 24 feet of extension rods. The sample depth was approximately 16 feet below the liquid surface inside the tank. The sludge was not viscous enough to remain inside the bucket head; however, enough sludge adhered to the sides of the bucket for a representative sample to be collected.

Representatives of Darling International, a local rendering facility, were also on-site to sample AST 2, which was suspected of containing animal tallow at some depth below the surface liquid in the tank. Mr. Don Muchow and Mr. Bill Fritz used a bomb sampler to grab subsurface material from AST 2. This material was black and had a petroleum odor. There was no evidence of pure animal tallow in the sample. Mr. Muchow and Mr. Fritz took the sample off-site for analysis and stated that they would report their findings to the U.S. EPA.

3.3 ANALYSIS PLAN

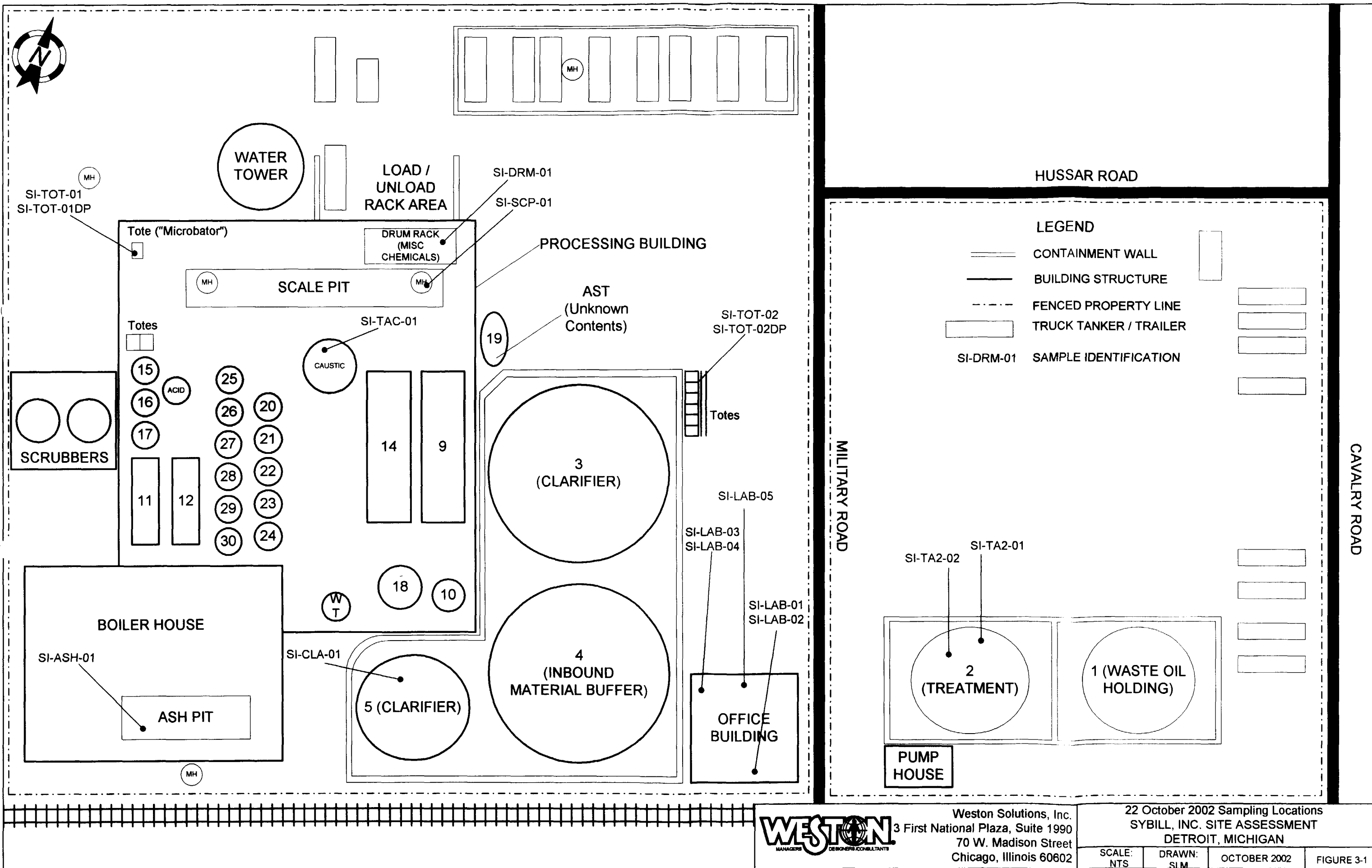
All START used oil samples were collected in at least three containers: one 40-milliliter (mL) glass jar for VOCs; one 40-mL glass jar for total halogens; and one 8-ounce glass jar for polychlorinated biphenyl compounds (PCBs); semivolatile organic compounds (SVOCs), Resource Conservation and Recovery Act (RCRA) list metals, flashpoint, and pH. Waste product samples were collected in two containers: one 40-mL glass jar for VOCs by the Toxicity Characteristic Leaching Procedure (TCLP) and one 8-ounce glass jar for TCLP PCBs, TCLP SVOCs, TCLP RCRA-list metals, flashpoint, reactivity, and pH. Duplicate samples were collected on a schedule of 1 per 10 samples per matrix; and matrix spike/matrix spike duplicate (MS/MSD) samples were collected 1 per 20 samples per matrix. Drum logs (Appendix B) and sampling forms (Appendix C) were completed during the investigation to record sampling activities and sample descriptions. Samplers donned sterile nitrile gloves during sample handling, and the gloves were changed following each sample

collection. All sample jars were laboratory cleaned prior to sampling and had teflon-coated lids. Samples were placed in an iced cooler as soon as possible after collection.

Samples collected for the total halogens analysis were sent by courier and under chain of custody to CT & E Laboratories of Ludington, MI. START delivered samples for all other analyses, under chain of custody, to Trace Analytical Laboratories, Inc., of Muskegon, MI.

3.4 DECONTAMINATION PROCEDURES

All sampling gear START used was dedicated and disposable except for the bucket auger that was used to sample the sludge layer of AST 2. All spent PPE and disposable sampling materials were containerized in labeled, sealed plastic bags and stored in the locked process building. The bucket auger was decontaminated after use with Alconox and deionized water. All cleaning effluent was consolidated and containerized in a labeled 5-gallon pail. At the completion of the investigation, the pail of decontamination liquid and garbage bags of contaminated debris were left on-site inside the locked process building.



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22 October 2002 Sampling Locations
SYBILL, INC. SITE ASSESSMENT
DETROIT, MICHIGAN

SCALE:
NTS

DRAWN:
SLM

OCTOBER 2002

FIGURE 3-1

Table 3-1: On Site Used Oil Inventory
Sybill, Inc., Detroit, Michigan

Location	Waste Container	Waste Volume (gallons)*	Waste Description
AST1	250,000 gallon AST**	50,000	used oil and sludge
AST2	250,000 gallon AST**	200,000	used oil and sludge
AST3	350,000-gallon AST, clarifier**	50,000	used oil
AST4	350,000-gallon AST, clarifier**	50,000	used oil
AST5	180,000-gallon AST, clarifier**	50,000	used oil
ASTC	secondary containment, cement, ASTs 1, 2, 3, 4, 5	30,000	oily water
BOX	box trailer in NE parking area	10,000	oil, volume unknown, has leaked into parking area
BOX	box trailer in N parking of lot at PRB	10,000	oil, volume unknown, has leaked into parking area and nearby manhole
PUMP	cement floor of pumphouse	100	several inches of oily sludge
Approximate Total Waste Oil and Oily Water on Site =		450,100	

* Numbers of waste containers and waste volumes are estimated where necessary.

** Tank volumes are estimated based on near capacity of AST 2 and estimate by EL that facility currently hold 400,000 gallons of used oil.

ASH = Ash Pit Area

AST# = Aboveground Storage Tank with identifying number

ASTC = AST Secondary Containment Area

BOIL = Boiler House

BOILB = Boiler House Basement

BOILB2 = Boiler House Sub-Basement

BOX = Box Trailer

CSC = Clarifier Secondary Containment Area

LAB = Office Building Upstairs Laboratory

OBFF = Office Building First Floor

OBUC = Office Building Upstairs Closet

PRB = Process Building

PUMP = Pump House

Table 3-2: On Site Potentially Hazardous Waste Inventory
Sybill, Inc., Detroit, Michigan

Location	Waste Container		Waste Quantity*	Waste Description
	Type	Number*		
ASH	55-gallon metal drum	6	330 gallons	35% hydrogen peroxide and unknowns
ASH	pit containment, cement	1	4000 gallons	ash pit at boilers containing oil, water and sludge
AST19	AST, approx. 12,000 gallons	1	12,000 gallons	unknown, crystals with high pH value at access valve
BOIL	55-gallon metal drum	30	1,650 gallons	various unknown drums, including crystalized powder
BOX	55-gallon metal drum	50	2,750 gallons	box trailer contains approx. 50 drums with unknown contents
CSC	plastic totes	6	1,500 gallons	"Rec Oil" and other unknowns
LAB	various plastic and glass, 250-mililiters to 2.5 liters	50	50 gallons	caustics, acids, metal standards, pH buffers, used oil samples and unknowns
OBFF	55-gallon metal drum	1	55 gallons	hexane
OBUC	5-gallon metal pail	10	50 gallons	acetone
OBUC	5-gallon metal pail	10	50 gallons	"carboline" rust inhibiting paint
OBUC	2.5-liter glass bottles	5	3 gallons	various liquid chemicals
OBUC	2-liter glass jars	5	3 gallons	various solid chemicals
PRB	55-gallon drums in drum rack and on floor	20	1,100 gallons	"tergitol", hydrogen peroxide and unknowns
PRB	plastic totes	5	1,250 gallons	"microbator," and unknown liquids
PRB	AST	1	4,000 gallons	caustic soda
PRB	scale pit	1	4000 gallons	oil and water
PUMP	55-gallon metal drum	5	1,250 gallons	sodium hypochlorite and 35% hydrogen peroxide

Approximate Total Drum Waste on Site = 26,041 gallons

BOILB	metal gas cylinders	30	20 cylinders	propane, acetylene, and oxygen gas
OBFF	metal gas cylinders	8	8 cylinders	hydrogen, nitrogen and oxygen gas

Approximate Total Compressed Gas Cylinders on Site = 28 cylinders

BOILB2	20-pounds, plastic bags	20	400 pounds	"amberlite" resin
BOX	20-yard roll-off box	1	30 tons	supsected to contain petroleum-contaminated soil

Approximate Total Waste Solids on Site = 30 tons

* numbers of waste containers and waste quantities are estimated where necessary

ASH = Ash Pit Area

AST# = Aboveground Storage Tank with identifying number

ASTC = AST Secondary Containment Area

BOIL = Boiler House

BOILB = Boiler House Basement

BOILB2 = Boiler House Sub-Basement

BOX = Box Trailer

CSC = Clarifier Secondary Containment Area

LAB = Office Building Upstairs Laboratory

OBFF = Office Building First Floor

OBUC = Office Building Upstairs Closet

PRB = Process Building

PUMP = Pump House

**Table 3-3: Results of Field Screening of Used Oil
 Sybill, Inc., 22 October 2002**

Sample ID	SI-TOT-02	SI-SCP-01	SI-TA2-01	SI-TA2-02	SI-CLA-01	SI-ASH-01
Sample Type	liquid	liquid	liquid	sludge	liquid	liquid
Screening Location	tote of flammable "Rec Oil" at loading dock	north access manhole to scale pit, process bldg	250,000 gallon AST#2, top layer	AST#2 subsurface sludge layer	AST#5/clarifier	ash pit, boiler house
Field Observations	VOC = 10 ppm CO = 135 ppm	none	none	none	none	none

ppm = parts per million

% = per cent

VOC = volatile organic compounds

CO = carbon monoxide

Table 3-4: Results of Field Screening of Waste Products
Sybill, Inc., 22 October 2002

Sample ID	SI-Field Screen-01	SI-DRM-01	SI-Field Screen-02	SI-Field Screen-03	SI-Field Screen-04	SI-Field Screen-05
Sample Type	liquid	wet crystals	liquid	liquid	liquid	liquid
Screening Location	drum in rack, process bldg	"tergitol" drum in rack, process bldg	puddle of liquid on floor, process bldg	drum in large puddle on floor, process bldg	tote east of south door, process bldg	second tote east of south door, process bldg
Field Observations	pH = 7-8 VOC, CO, LEL, H2S = 0	pH = 7-8 VOC, LEL, H2S = 0 CO = 220	pH = 7	pH = 5	pH = 7-8	pH = 9-10

ppm = parts per million

% = per cent

VOC = volatile organic compounds

LEL = lower explosive limit

Table 3-4: Results of Field Screening of Waste Products
Sybill, Inc., 22 October 2002

Sample ID	SI-TOT-01	SI-LAB-01	SI-LAB-02	SI-LAB-04	SI-Field Screen-06	SI-Field Screen-07	SI-LAB-05
Sample Type	liquid	liquid	liquid	liquid	liquid	liquid	liquid
Screening Location	tote of "microbator" in southwest corner of process bldg	5-gallon pail of "acetone," lab closet	5-gallon pail of "carboline," lab closet	2.5 liter jar of "nitric acid," lab	1 liter jar of "sodium hydroxide ion"	1 liter jar of "microbator", lab	55-gallon drum of "hexane," office bldg
Field Observations	pH = 11	VOC = 2,000 ppm LEL = 19% CO, H2S = 0	VOC = 90 CO, LEL, H2S = 0	pH = 0-1	pH = 14	pH = 7	VOC = 778 ppm CO, LEL, H2S = 0

ppm = parts per million

% = per cent

VOC = volatile organic compounds

LEL = lower explosive limit

**Table 3-4: Results of Field Screening of Waste Products
Sybill, Inc., 22 October 2002**

Sample ID	SI-TAC-01	SI-Field Screen-08
Sample Type	crystals	crystals
Screening Location	AST, approx 4000 gallons, "caustic soda," process bldg	AST 19, crystals accumulated at access valve
Field Observations	none	pH = 14

ppm = parts per million

% = per cent

VOC = volatile organic compounds

LEL = lower explosive limit

SECTION 4

ENVIRONMENTAL INVESTIGATION RESULTS

During site reconnaissance at Sybill, U.S. EPA chose specific locations for sampling. Sampling locations were evaluated based on the type and amount of material present, the amount of organic vapors detected inside the containers, and the condition of the container that held the material. Observations made at sampling locations are summarized in Tables 3-3 and 3-4 and in Appendices B, C, and D. Analytical parameter selections for each sample are outlined in Section 3.2. Analytical results for these analyses were compared to a regulatory criteria levels and are presented in Tables 4-1 and 4-2 and in Appendix D. The characteristics of hazardous waste (40 Code of Federal Regulations [CFR] 261.20-24) and the specifications for used oil (40 CFR 279.11) are presented as comparison criteria.

4.1 USED OIL ANALYTICAL RESULTS

The waste oil or oil of unknown origin that was sampled on-site from tanks, totes, pits, or sumps was considered to be used oil for the site assessment. Analytical results for the following samples are discussed in this section: SI-TOT-02, SI-TOT-02DP, SI-TA2-01, SI-TA2-02, SI-CLA-01, SI-ASH-01, and SI-SCP-01. All used oil analytical results are presented in Table 4-1.

4.1.1 Total Halogens in Used Oil

All results for total halogens in waste oil samples revealed concentrations that were above the method detection limits. Results ranged from 80 micrograms per kilogram (ug/kg) to 4,043 ug/kg total halogens with the following samples having the greatest concentrations:

- SI-CLA-01 contained 4,043 ug/kg total halogens.
- SI-ASH-01 contained 1,804 ug/kg total halogens.
- SI-TA2-01 contained 1,278 ug/kg total halogens.

However, none of the samples had a concentration of total halogens exceeding the specifications for used oil (4,000,000 ug/kg total halogens).

4.1.2 Metals in Used Oil

Five used oil samples collected during this investigation (SI-TA2-01, SI-TA2-02, SI-CLA-01, SI-ASH-01, and SI-SCP-01) contained detectable levels of a total of seven different metals (Table 4-1). Three used oil samples contained concentrations of metals that exceeded the specifications for used oil:

- SI-TA2-01 contained 15 milligrams per kilogram (mg/kg) arsenic and 120 mg/kg lead.
- SI-TA2-02 contained 26 mg/kg arsenic and 35 mg/kg chromium.
- SI-SCP-01 contained 35 mg/kg chromium.

The laboratory reported that due to the nature of the sample matrix, a smaller than usual sample aliquot was used for some analyses. In other analyses, the elevated analyte concentrations made sample dilution necessary. Both of these processes resulted in effectively raising the detection limit for the affected analyses.

4.1.3 VOCs in Used Oil

Five used oil samples contained detectable levels of VOCs (SI-TOT-02, SI-TOT-02DP, SI-TA2-02, SI-ASH-01, and SI-SCP-01). Five separate VOCs were detected in these samples (benzene, toluene, ethyl benzene, total xylenes, and styrene). The greatest concentrations of these VOCs appeared in the following samples:

- SI-TOT-02DP at 170,000 ug/kg styrene;
- SI-TOT-02 and SI-TOT-02DP at 130,000 ug/kg total xylenes; and
- SI-ASH-01 at 49,000 ug/kg toluene.

The laboratory reported that due to the nature of the sample matrix, a smaller than usual sample aliquot was used for some analyses. In other analyses, the high analyte concentrations made sample dilution necessary. Both of these processes resulted in effectively raising the detection limit for the affected analyses. See Table 4-1 for details.

4.1.4 SVOCs in Used Oil

Two used oil samples contained detectable levels of SVOCs (SI-TOT-02 and SI-TOT-02DP). A total of five different SVOCs were detected in these samples (naphthalene, 2-methylnaphthalene, acenaphthalene, fluorene, and phanthrene). The SVOCs with the highest detected concentrations in these samples included the following:

- 2-methylnaphthalene at 140,000 mg/kg (SI-TOT-02DP) and at 130,000 mg/kg (SI-TOT-02); and
- Naphthalene at 38,000 mg/kg (SI-TOT-02DP) and at 37,000 mg/kg (SI-TOT-02).

4.1.5 PCBs in Used Oil

None of the used oil samples contained levels of PCBs that were above the method detection level.

4.1.6 Characteristics of Hazardous Waste in Used Oil

Through analysis for flashpoint, it was determined that one used oil sample exceeded the criteria for characteristic hazardous waste (SI-ASH-01, flashpoint of 70 degrees Fahrenheit [°F]). One other sample, SI-SCP-01, had a flashpoint of 170 °F. All other used oil samples had flashpoints greater than 200°F.

4.2 CHARACTERISTICS OF HAZARDOUS WASTE IN WASTE PRODUCTS

Waste products are defined here as all samples that were not obviously used oil. These samples include all drum and laboratory container samples and the sample from the process building labeled "Microbator." Analytical results for the following samples are discussed in this section: SI-DRM-01, SI-TOT-01, SI-TOT-01DP, SI-LAB-01, SI-LAB-02, SI-LAB-04, SI-LAB-05, and SI-TAC-01. All waste product analytical results are presented in Table 4-2.

4.2.1 TCLP Metals in Waste Product Samples

None of the waste product samples contained levels of metals extracted by TCLP that were above the method level of detection.

4.2.2 TCLP VOCs in Waste Product Samples

Samples SI-LAB-01, SI-LAB-02, and SI-LAB-05 contained levels of two VOCs extracted by TCLP that were above the method level of detection. Levels of TCLP benzene exceeded the criteria for characteristic hazardous waste in two of these samples (SI-LAB-01 and SI-LAB-05). Levels of TCLP methyl ethyl ketone (MEK) exceeded the criteria for characteristic hazardous waste in one of these samples (SI-LAB-01).

4.2.3 TCLP SVOCs in Waste Product Samples

None of the waste product samples contained levels of SVOCs extracted by TCLP that were above the method level of detection.

4.2.4 TCLP PCBs in Waste Product Samples

None of the waste product samples contained levels of PCBs extracted by TCLP that were above the method level of detection.

4.2.5 Other Characteristics of Hazardous Waste in Waste Product Samples

Through analysis for flashpoint and pH, it was determined that six waste product samples were equal to or exceeded the criteria for characteristic hazardous waste and one sample that was determined to be combustible:

- Samples SI-TOT-01DP (140 °F), SI-LAB-01 (100 °F), SI-LAB-02 (95 °F) and SI-LAB-05 (75 °F) met or exceeded the characteristic criteria for hazardous waste by flashpoint.
- Samples SI-LAB-04 (pH=0) and SI-TAC-01 (pH=12.97) exceeded the criteria for characteristic hazardous waste by pH.
- The flashpoint of sample SI-SCP-01 (170 °F) did not meet the criteria for characteristic hazardous waste; however, it is sufficiently low to consider the substance combustible.

Table 4-1: Analytical Results for Used Oil Samples
Sybill, Inc. 22 October 2002

Analytical Parameter		Sample Name (SI-)							Criteria Level
		SI-TOT-02	SI-TOT-02DP	SI-TA2-01	SI-TA2-02	SI-CLA-01	SI-ASH-01	SI-SCP-01	
Characteristics of Hazardous Waste	flashpoint (degrees F)	>200	>200	>200	>200	>200	70	170	<140^a
	pH	6.69	6.9	4.59	6.41	4.38	6.08	7.96	<2, >12.5^a
Total VOCs	benzene (ug/kg)	7,400	7000 J	6,000 U	530 U	750 U	910	700 U	NL
	toluene (ug/kg)	26,000	28,000	6,000 U	3,500	750 U	49,000	700 U	NL
	ethyl benzene (ug/kg)	23,000	25000 J	6,000 U	960	750 U	5,400	890	NL
	xylene (total) (ug/kg)	130,000	130,000	18,000 U	6,600	2,300 U	26,000	3,500	NL
	styrene (ug/kg)	160,000	170,000	6,000 U	530 U	750 U	550 U	700 U	NL
Total SVOCs	naphthalene (mg/kg)	37,000	38,000	250 U	250 U	250 U	500 U	500 U	NL
	2-methylnaphthalene (mg/kg)	130,000	140,000	250 U	250 U	250 U	500 U	500 U	NL
	acenaphthene (mg/kg)	3,600	3,700	250 U	500 U	250 U	500 U	500 U	NL
	fluorene (mg/kg)	1,700	1,700	250 U	500 U	250 U	500 U	500 U	NL
	phenanthrene (mg/kg)	1,300	1,300	25 U	50 U	25 U	50 U	50 U	NL
Total Metals	arsenic (mg/kg)	0.2 U	0.2 U	15	26	0.23	1.2	1.2	5^b
	barium (mg/kg)	1.0 U	1.0 U	36	140	2.9	13	150	NL
	cadmium (mg/kg)	0.05 U	0.05 U	0.17	0.29	0.05 U	0.21	1.2	2^b
	chromium (mg/kg)	0.88 U	0.87 U	7.3	35	3	6.3	35	10^b
	lead (mg/kg)	1.0 U	1.0 U	12	35	5.9	14	81	100^b
	silver (mg/kg)	0.5 U	0.5 U	0.5 U	0.85	0.5 U	0.5 U	0.5 U	NL
	mercury (mg/kg)	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2	NL
Total Halogens	(ug/kg)	80 J	277 J	1,278	461	4,043	1,804	728	4,000,000^b

Results for analyses that had no results above the limits of detection are not presented in table.

^a Criteria are characteristics of hazardous waste as listed in 40 CFR 261.20-24

^b Criteria are specifications for used oil; oil with constituents not in exceedence of criteria levels shall not be subject to regulations of 40CFR 279.11
Sample results that are bold and highlighted have exceeded the criteria level for that contituent.

NA = not analyzed

U = result is below method detection limit

J = results are estimated

NL = not listed

Table 4-2: Analytical Results for Waste Product Samples
Sybill, Inc. 22 October 2002

Analytical Parameter		Sample Name								Criteria Level
		SI-DRM-01	SI-TOT-01	SI-TOT-01DP	SI-LAB-01	SI-LAB-02	SI-LAB-04	SI-LAB-05	SI-TAC-01	
Characteristics of Hazardous Waste	flashpoint (degrees F)	>200	>200	140	100	95	NA	75	NA	<140 ^a
	pH	4.8	6.54	7.38	3.88	4.05	0	4.01	12.97	<2, >12.5 ^a
	TCLP benzene (mg/L)	100 UJ	1.0 U	5.0 UJ	1.2	0.1 U	NA	1.1	NA	0.5 ^a
	TCLP MEK (mg/L)	500 UJ	5.0 U	25 U	200	77	NA	5.0 U	NA	200 ^a

Results for analyses that had no results above the limits of detection are not presented in table.

^a Criteria are characteristics of hazardous waste as listed in 40DFR 261.20-24

Sample results that are bold and highlighted have exceeded the criteria level for that constituent.

MEK = methyl ethyl ketone

NA = not analyzed

U = result is below method detection limit

J = results are estimated

NL = not listed

SECTION 5

THREATS TO HUMAN HEALTH AND THE ENVIRONMENT

Hazardous wastes and large volumes of used oil have been identified at Sybill. The following section presents a discussion of the threats to human health and the environment that can be attributed to each independent waste stream.

5.1 THREATS FROM OIL WASTE ON SITE

Conditions at Sybill, with respect to used oil, that warrant an appropriate removal action as set forth in paragraph (b)(2) of 40 CFR Part 300.415 of the National Oil and Hazardous Substances Contingency Plan (NCP) include the following:

- **Actual or potential exposure of nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.**

Field observations made during the site assessment indicate the presence of approximately 450,000 gallons of uncontrolled, used oil and oily sludge at the abandoned Sybill facility. The facility gates and AST access hatches and valves have been unlocked and are open thereby making the contents readily accessible to the nearby population. Site inspections have revealed that trespassers and vandals have routinely gained access to the facility. These persons could readily come into contact with the oils on site or remove oil from the site.

- **Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release.**

The facility has five ASTs on the exterior of the buildings. The current combined volume of used oil in these ASTs is estimated to be approximately 400,000 gallons. Evidence of a recent release of petroleum materials was evident in the secondary containment for ASTs Nos. 1, 2, 3, 4, and 5. The on-site pump house contains both sludge and free oil. In addition, the on-site ASTs do not have locked valves, and there is unrestricted access to the top of the tanks.

The containment around ASTs Nos. 3, 4, and 5 is not continuous. There are pipes and breaks in the containment wall that could allow oil to be released from the

- **Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.**

The poor condition of building rooftops on site along with open windows and doors could allow rain or snow into the buildings that could accumulate as standing water. Many containers that may be storing hazardous materials are resting directly on the floors of the buildings where, if they were inundated with water, the container integrities could be compromised due to rusting or other wear. This may have already occurred inside the process building where a rusted drum and two totes were observed to be resting on the building floor in a large pool of water.

SECTION 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSION

The Sybill site is located in a mixed industrial and residential area of Detroit, Wayne County, Michigan. The 15-acre site was most recently operated as a used oil processing facility until all facility operations permits were revoked and utility services were terminated in June 2001. Sybill management eventually filed for bankruptcy and abandoned the facility. While the facility was processing used oil, it was sited with various violations of environmental regulations. New estimates made during the site assessment indicate that approximately 450,000 gallons of used oil in addition to over 26,000 gallons of potentially hazardous wastes, compressed gases and contaminated soils are present on site. Evidence of on-site trespassing and vandalism are present.

START conducted a site assessment on 22 October 2002, and confirmed the presence of hazardous wastes on site in addition to large amounts of used oil and structural hazards. Based on the results of field screening and laboratory analysis of substances collected on site and according to 40 CFR Chapter 1 - 261.24, oil and waste liquids were collected that were flammable, corrosive or contained concentrations of benzene and MEK as determined by TCLP that exceeded the regulatory limits. In addition, oils that may have hazardous substances mixed into them were also identified. Details of the sampling results are summarized in the following:

- Five samples, one each from a drum, a tote and an ash pit, and two from laboratory containers were determined to be hazardous waste by flashpoint analysis. The flashpoints of these material ranged from 70-140 °F, which meet or exceed the criteria for characteristic hazardous waste.
- In two samples from laboratory containers, the resulting concentrations of benzene and MEK after TCLP preparation of samples also exceeded the criteria for characteristic hazardous waste.

- An oil sample from the scale pit, had a flash point of 170 °F, indicating that the material was combustible.
- One sample from a laboratory container and one from a caustic soda AST were determined to be hazardous waste by corrosivity analysis. The pH values of these materials were zero and 12.97, which both exceed the criteria for a characteristic hazardous waste.
- One sample of oil from a tote on site was found to have elevated levels of VOCs and SVOCs which may indicate that it has been mixed with solvents.

Based on the completed site assessment, used oil being stored at Sybill poses a significant threat to human health as defined under 40 CFR §300.415(b)(2)(i)-(viii):

1. Actual or potential exposure of nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.
2. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release.
3. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.

Based on the completed site assessment, potentially hazardous waste being stored at Sybill poses a significant threat to human health as defined under 40 CFR §300.415(b)(2)(i)-(viii):

1. Actual or potential exposure of nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.
2. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release.
3. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.

6.2 **RECOMMENDATIONS**

Based on the conclusions drawn from the information gathered during the Site Assessment and the hazardous waste determinations made from the analytical results, START recommends the following:

- The identified hazardous waste on site should be removed and disposed of at a licensed hazardous waste disposal facility.
- The large volume of used oil on site should be removed and recycled at a licensed used oil treatment or blending facility.
- Structural hazards on site should be demolished to eliminate potential harm to trespassers as site security is an imminent issue.

Volume estimates for determining removal effort have been calculated for both oil and potentially hazardous wastes on site. The results are presented below.

6.2.1 **Estimated Volume of Oil Waste on Site**

By definition in 33 United States Code (USC) 40 Subchapter I Section 2701, "oil" is considered oil of any kind or in any form, including petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil, but does not include any substance that is specifically listed or designated as a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act [(CERCLA), see below]. Table 3-1 of this report, On Site Used Oil Inventory, presents an approximate volume of used oil currently contained on-site. Based on available information about the nature and source of this material, there is approximately 450,000 gallons of "oil" area on-site, as defined above.

Oil of the nature described above is a potential candidate for cleanup and removal funding through the Oil Pollution Act (OPA) and the Oil Spill Liability Trust Fund (OSLTF). Ultimately,

the decision for funding through OPA is at the discretion of the USCG.

6.2.2 Estimated Volume of Potentially Hazardous Waste on Site

Hazardous waste is defined in 42 USC 103 Subchapter I Section 9601 as “any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to Section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance....” Table 3-2 of this report, On-Site Potentially Hazardous Waste Inventory, presents the approximate volume of the total waste that may be hazardous and is currently contained on-site. Based on information gathered about the materials during recent site visits and analytical data for selected wastes, there is approximately 26,000 gallons of potentially hazardous waste in drums, totes, or containers; 30 tons of contaminated soil; and 28 compressed gas cylinders on-site.

It should be noted that the oily waste that was sampled from the ash pit in the boiler house (SI-ASH-01), although it appeared to be similar to oil or a petroleum product, was determined to be a characteristic hazardous waste by laboratory analysis; therefore, it is included in the volume estimate for on-site hazardous waste. Similarly, samples taken from a tote near the loading dock that was labeled “Rec Oil” (SI-TOT-02 and SI-TOT-02DP) had concentrations of VOCs and SVOCs that were markedly different from the samples collected from AST 2 (SI-TA2-01 and SI-TA2-02) and a clarifier (SI-CLA-01). Sample SI-SCP-01 is also included in this volume estimate because the sample was taken from waste oil of unknown origin inside the scale pit of the Process Building. This material was determined to be combustible by flashpoint analysis. In these cases, the oil-like materials in the “Rec Oil” tote and the scale pit are of unknown origin and may have an organic solvent mixed into them, thereby making the mixtures hazardous wastes.

Hazardous waste as described above is a potential candidate for cleanup and removal funding through CERCLA and Superfund.

SECTION 7

REFERENCES

40 Code of Federal Regulations (CFR) Part 261, Identification and listing of hazardous waste.

40 CFR Part 279.11, Specification for used oil.

40 CFR Part 300.415, The National Oil and Hazardous Substances Contingency Plan.

33 United States Code (USC) Part 40 subchapter I section 2701, Definition of oil.

42 USC Part 103 subchapter I section 9601, Definition of hazardous waste.

Weston Inc., R. F. River Rouge Oil Spill, Dearborn, Michigan, April 2002, Site Inspection Report for Sybill, Inc., Detroit, Wayne County, Michigan, 2002.

APPENDIX A

Photo Log



SITE: Sybill, Inc.

DATE: 10 May 2002

PHOTO NO: 1

DIRECTION: S

SUBJECT: A view of the Sybill main facility.

PHOTOGRAPHER: C. Green



SITE: Sybill, Inc.

DATE: 10 May 2002

PHOTO NO: 2

DIRECTION: NE

SUBJECT: A view of ASTs 1 and 2. Samples SI-TA2-01 and SI-TA2-02 collected from AST 1 (on the right).

PHOTOGRAPHER: C. Green



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 3

DIRECTION: N

SUBJECT: A view of an open gate at the Pump House.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 4

DIRECTION: SE

SUBJECT: Ungated alley access to Boiler House.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 13 May 2002

PHOTO NO: 5

DIRECTION: W

SUBJECT: A view of an unsecured west gated entrance to the south property.

PHOTOGRAPHER: T. Borman



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 6

DIRECTION: Down

SUBJECT: A view of stripped wires in the Office Building.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 7

DIRECTION: SW

PHOTOGRAPHER: R. Moffett

SUBJECT: A view of the vandalized laboratory. Sample SI-LAB-04 collected and SI-Field Screen-06, -07, and -08 conducted at this location.



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 8

DIRECTION: SE

PHOTOGRAPHER: R. Moffett

SUBJECT: A view of the vandalized chemical storage closet, upstairs Office Building. Samples SI-LAB-01 and SI-LAB-02 collected at this location.



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 9

DIRECTION: SW

SUBJECT: A view of the debris due to vandalism in Boiler House.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 10 May 2002

PHOTO NO: 10

DIRECTION: NW

SUBJECT: A view of drum rack in Process Building. Sample SI-DRM-01 collected and SI-Field Screen-01 conducted at this location.

PHOTOGRAPHER: C. Green



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 11

DIRECTION: SW

SUBJECT: A view of the tote of flammable "Rec Oil" at loading dock area. Samples SI-TOT-02 and SI-TOT-02DP collected at this location.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 12

DIRECTION: Down

SUBJECT: A view of the Amberlite bags in Boiler House.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 13

DIRECTION: N

SUBJECT: A view of some compressed gas cylinders in the Boiler House.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 14

DIRECTION: NW

SUBJECT: A view of some oxygen and acetylene gas cylinders in the Boiler House.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 10 May 2002

PHOTO NO: 15

DIRECTION: W

SUBJECT: A view of drums of unknown contents in Boiler House next to the Ash Pit.

PHOTOGRAPHER: C. Green



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 16

DIRECTION: S

SUBJECT: A view of containers with unknown contents in the Boiler House.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 17

DIRECTION: S

SUBJECT: A view of the drums of unknown contents in the Boiler House.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 18

DIRECTION: Down

SUBJECT: A view of the valve on AST 19 where SI-Field Screen-08 was conducted.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

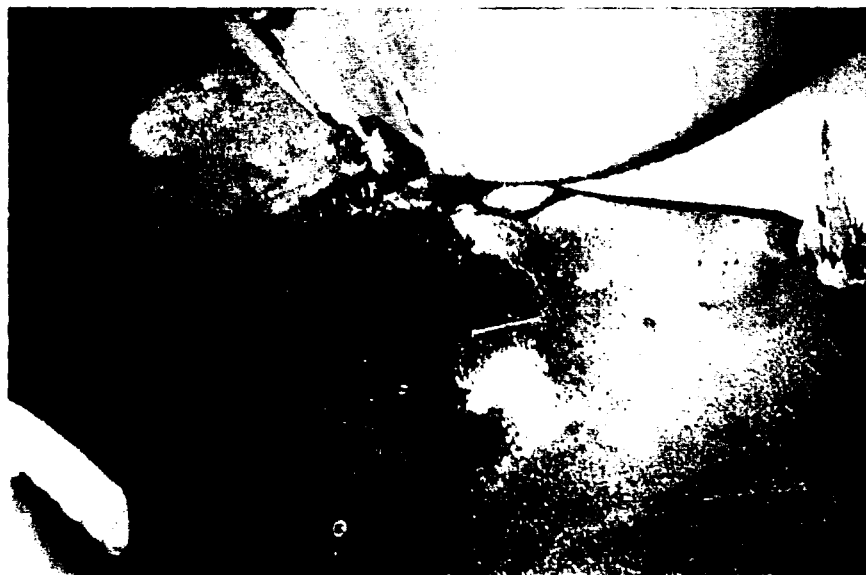
DATE: 10 May 2002

PHOTO NO: 19

DIRECTION: Down

SUBJECT: A view of encrusted pumps in the basement of the Processing Building.

PHOTOGRAPHER: C. Green



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 20

DIRECTION: Down

SUBJECT: Another view of the corroded valve in AST 19.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

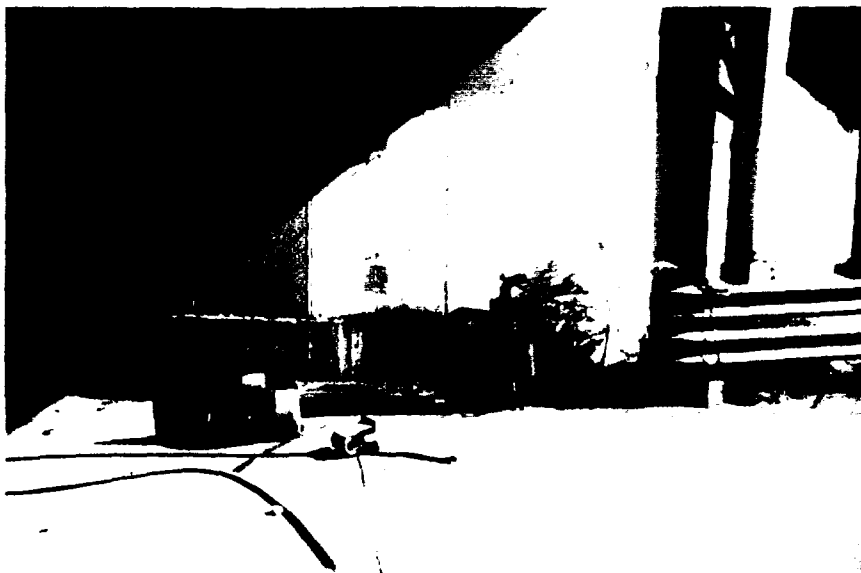
DATE: 22 October 2002

PHOTO NO: 21

DIRECTION: SW

SUBJECT: Oily water between ASTs 3 and 4.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 22

DIRECTION: SE

SUBJECT: A view of the containment at AST 5, historic staining visible in the foreground.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

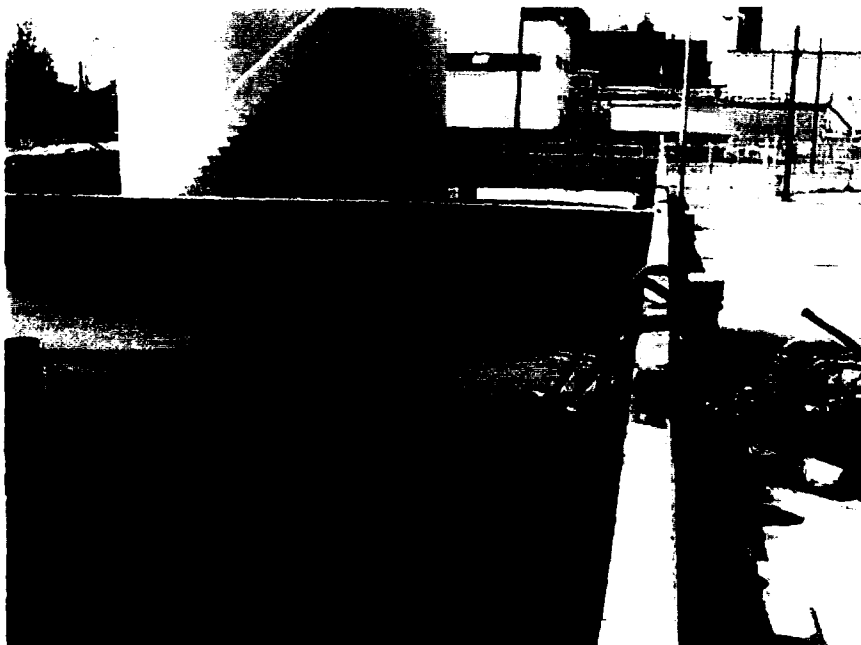
DATE: 22 October 2002

PHOTO NO: 23

DIRECTION: Down

SUBJECT: A view of the containment at AST 5, historic staining is visible.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 10 May 2002

PHOTO NO: 24

DIRECTION: SW

SUBJECT: A view of oil inside secondary containment around AST 1.

PHOTOGRAPHER: C. Green



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 25

DIRECTION: S

SUBJECT: A view of the drainage around the tote containment at loading dock.

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 10 May 2002

PHOTO NO: 26

DIRECTION: Down

SUBJECT: A view of the contents in the north access point of the scale pit in the Process Building. SI-SCP-01 collected at this location.

PHOTOGRAPHER: C. Green



SITE: Sybill, Inc.

DATE: 10 May 2002

PHOTO NO: 27

DIRECTION: N

SUBJECT: A view of oil released from the derelict tanker.

PHOTOGRAPHER: C. Green



SITE: Sybill, Inc.

DATE: 13 May 2002

PHOTO NO: 28

DIRECTION: W

SUBJECT: A view of historic staining beneath two tanker trucks on the spill pad.

PHOTOGRAPHER: T. Borman



SITE: Sybill, Inc.

DATE: 13 May 2002

PHOTO NO: 29

DIRECTION:
Down

SUBJECT: A view of a sump in the Pump House.

PHOTOGRAPHER: T. Borman



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 30

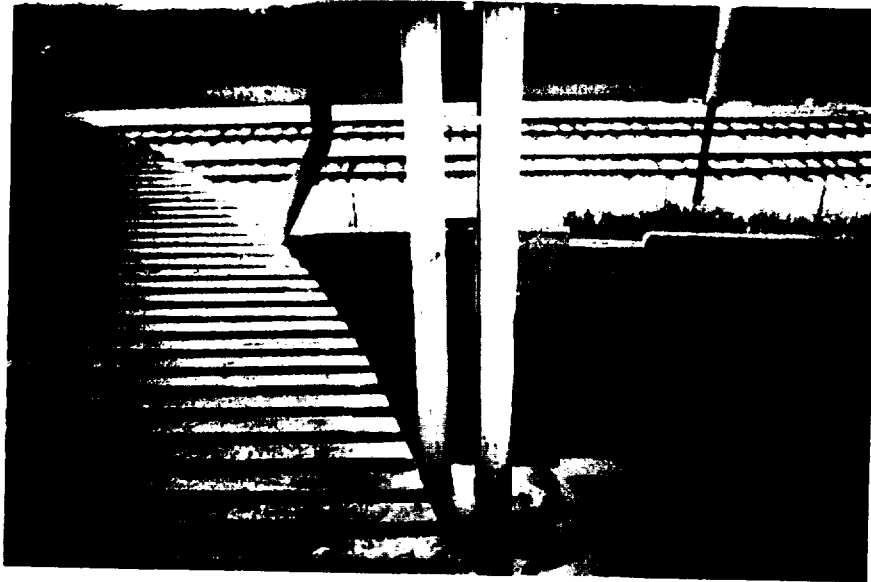
DIRECTION: SW

SUBJECT: A view of AST 19, no containment, sewer nearby.

PHOTOGRAPHER: R. Moffett

APPENDIX B

Drum Log



SITE: Sybill, Inc.

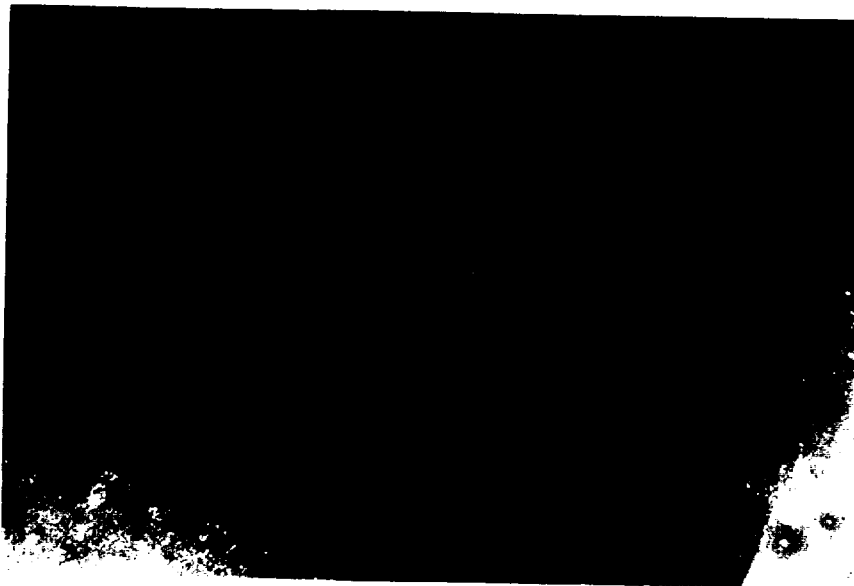
DATE: 22 October 2002

PHOTO NO: 31

DIRECTION: SE

SUBJECT: A view a pipe protruding from the wall of the secondary containment at AST 5. Liquid level 8 to 10 inches below (barely visible, between uprights).

PHOTOGRAPHER: R. Moffett



SITE: Sybill, Inc.

DATE: 10 May 2002

PHOTO NO: 32

DIRECTION: Down

SUBJECT: A view of the Ash Pit containing oil in the Boiler House. SI-ASH-01 collected at this location.

PHOTOGRAPHER: C. Green



SITE: Sybill, Inc.

DATE: 22 October 2002

PHOTO NO: 33

DIRECTION: E

SUBJECT: START performing Level B sampling of
unknowns in Process Building.

PHOTOGRAPHER: R. Moffett

SITE NAME: Sybil Inc. Site Assessment

HAZARD INFORMATION

[illegible][illegible]

SITE NAME: Sybill Inc., Site Assessment

HAZARD INFORMATION

[illegible]

GRAND INVENTORY

SITE NAME: Swilling Site Assessment

TDD: S05-0209-005		Location <i>PROCESS BUILDING</i>		Container NO: SI- FIELD SCREEN - 05																
Container Size 85-gallon <input type="checkbox"/> 5-gallon <input type="checkbox"/> 55-gallon <input type="checkbox"/> Other <input checked="" type="checkbox"/> 30-gallon <input type="checkbox"/> overpack <input type="checkbox"/> <i>TOTE</i>		Container Type Metal <input type="checkbox"/> Glass <input type="checkbox"/> Plastic <input checked="" type="checkbox"/> Other <input type="checkbox"/> Fiber <input type="checkbox"/>		Container Condition Good <input type="checkbox"/> Fair <input checked="" type="checkbox"/> Poor <input type="checkbox"/> Notes:																
Container Opening Ring Lid <input type="checkbox"/> Tight <input type="checkbox"/> Bung <input checked="" type="checkbox"/> Rusted <input type="checkbox"/> Pry Top <input type="checkbox"/> Loose <input type="checkbox"/> Other <input type="checkbox"/> Off <input type="checkbox"/>		Container Markings 		Container Color <i>YELLOWISH/CLEAR</i> Contents Color <i>CLEAR</i> layer 1 layer 2 layer 3																
Container Contents Amount Full <input type="checkbox"/> Empty <input type="checkbox"/> Partial <input checked="" type="checkbox"/> <i>80</i> % Unknown <input type="checkbox"/>		Container Contents State Unknown <input type="checkbox"/> Semi-solid <input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input checked="" type="checkbox"/> Multiphase <input type="checkbox"/>		Screening Data pH <i>9-10</i> MultiRae uFID <table border="1"> <thead> <tr> <th>VOC</th> <th>CO</th> <th>O2</th> <th>LEL</th> <th>H2S</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>		VOC	CO	O2	LEL	H2S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VOC	CO	O2	LEL	H2S																
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																
Container Sampling Data Date/Time Sampled <i>10/22/02 12:08</i> Sample ID <i>FIELD SCREEN</i> Sampler <i>D. CAPONE</i> Method <i>PH STRIP</i> COC# <i>N.A.</i>		Comments																		

HAZCAT INFORMATION

[illegible]

[illegible]

[illegible]

SITE NAME: Sybill Inc., Site Assessment:

TDD: S05-0209-005		Location <u>MAIN BLDG</u> <u>UPSTAIRS LAB</u>		Container NO: SI- <u>LAB-03</u>											
Container Size 85-gallon <input type="checkbox"/> 5-gallon <input type="checkbox"/> 55-gallon <input type="checkbox"/> Other <input checked="" type="checkbox"/> 30-gallon <input type="checkbox"/> overpack <input type="checkbox"/> <u>25 L</u>		Container Type Metal <input type="checkbox"/> Glass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Other <input type="checkbox"/> Fiber <input type="checkbox"/>		Container Condition Good <input type="checkbox"/> Fair <input checked="" type="checkbox"/> Poor <input type="checkbox"/> Notes:											
Container Opening Ring Lid <input type="checkbox"/> Tight <input checked="" type="checkbox"/> Rung <input type="checkbox"/> Rusted <input type="checkbox"/> Pry Top <input type="checkbox"/> Loose <input type="checkbox"/> Other <input checked="" type="checkbox"/> Off <input type="checkbox"/>		Container Markings <u>"HEXANE"</u>		Container Color <u>AMBER</u> Contents Color <u>CLEAR</u> layer 1 layer 2 layer 3											
Container Contents Amount Full <input type="checkbox"/> Empty <input type="checkbox"/> Partial <input checked="" type="checkbox"/> <u>50</u> % Unknown <input type="checkbox"/>		Container Contents State Unknown <input type="checkbox"/> Semi-solid <input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input checked="" type="checkbox"/> Multiphase <input type="checkbox"/>		Screening Data pH _____ MultiRae uFID <table border="1"> <tr> <th>VOC</th> <th>CO</th> <th>O2</th> <th>LEL</th> <th>H2S</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		VOC	CO	O2	LEL	H2S					
VOC	CO	O2	LEL	H2S											
Container Sampling Data Date/Time Sampled <u>10/22/02 13:40</u> Sample ID <u>NOT SUBMITTED</u> Sampler <u>D. CAPONE</u> Method <u>POLAR</u> COC# <u>N.A.</u>		Comments													

HAZARD INFORMATION

[illegible]

[illegible]

SITE NAME Sybill Inc. Site Assessment

TDD: S05-0209-005		Location MAIN BLDG UPSTAIRS LAB		Container NO: SI- FIELD SCREEN-07	
Container Size 85-gallon <input type="checkbox"/> 5-gallon <input type="checkbox"/> 55-gallon <input type="checkbox"/> Other <input checked="" type="checkbox"/> 30-gallon <input type="checkbox"/> overpack <input type="checkbox"/> ~1/2		Container Type Metal <input type="checkbox"/> Glass <input type="checkbox"/> Plastic <input checked="" type="checkbox"/> Other <input type="checkbox"/> Fiber <input type="checkbox"/>		Container Condition Good <input type="checkbox"/> Fair <input checked="" type="checkbox"/> Poor <input type="checkbox"/> Notes:	
Container Opening Ring Lid <input type="checkbox"/> Tight <input checked="" type="checkbox"/> Rung <input type="checkbox"/> Rusted <input type="checkbox"/> Pry Top <input type="checkbox"/> Loose <input type="checkbox"/> Other <input checked="" type="checkbox"/> Off <input type="checkbox"/>		Container Markings "MICROBATOR"		Container Color CLEAR Contents Color CLEAR layer 1 layer 2 layer 3	
Container Contents Amount Full <input type="checkbox"/> Empty <input type="checkbox"/> Partial <input checked="" type="checkbox"/> % Unknown <input type="checkbox"/>		Container Contents State Unknown <input type="checkbox"/> Semi-solid <input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input checked="" type="checkbox"/> Multiphase <input type="checkbox"/>		Screening Data pH 7 MultiRae uFID	
Container Sampling Data Date/Time Sampled 10/22/02 13:48 Sample ID FIELD SCREEN Sampler J. KIMBLE Method pH STRIP COC# N.A.		Comments			

HAZARD INFORMATION

[illegible]

[illegible]

[illegible][illegible]

SITE NAME: Sybill Inc. Site Assessment

TDD: S05-0209-005

Container Type

Good	<input checked="" type="checkbox"/>
Fair	<input type="checkbox"/>
Poor	<input type="checkbox"/>

Container Size	
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
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90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

250,000
~~100,000~~ GILLON AST

Container Markings	
1	1000
2	1000
3	1000
4	1000
5	1000
6	1000
7	1000
8	1000
9	1000
10	1000
11	1000
12	1000
13	1000
14	1000
15	1000
16	1000
17	1000
18	1000
19	1000
20	1000
21	1000
22	1000
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81	1000
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83	1000
84	1000
85	1000
86	1000
87	1000
88	1000
89	1000
90	1000
91	1000
92	1000
93	1000
94	1000
95	1000
96	1000
97	1000
98	1000
99	1000
100	1000

Container Color WHITE

Container Opening

Ring Lid	<input type="checkbox"/>	Tight	<input checked="" type="checkbox"/>
Rung	<input type="checkbox"/>	Rusted	<input checked="" type="checkbox"/>
Pry Top	<input type="checkbox"/>	Loose	<input type="checkbox"/>
Other	<input checked="" type="checkbox"/>	Off	<input type="checkbox"/>

18704

[illegible]

Contents Color	BLACK OIL	layer 1
		layer 2
		layer 3

	Container	Contents	Amount
Full			
Empty			
Partial	X		98 %
Unknown			(~6 feet to surface of oil)

Container Contents State		
Unknown	<input type="checkbox"/>	Semi-solid <input type="checkbox"/>
Solid	<input type="checkbox"/>	
Liquid	<input checked="" type="checkbox"/>	
Multiphase	<input type="checkbox"/>	

Screening Data					
pH _____					
MultiRae uFID	VOC	CO	O2	LEL	H2S

Container Sampling Data	
Date/Time Sampled	10/22/02 15:15
Sample ID	SI-TA2-01
Sampler	S. MEYER
Method	JAR DIP
COC#	CK 248 TRACE

Comments	

HAZARD INFORMATION

[illegible]

[illegible]

SITE NAME: Sybill Inc. Site Assessment

TDD: S05-0209-005		Location <u>CONTAINED CLARIFIER</u> <u>AREA ENCLOSED CLARIFIER</u>		Container NO: SI- ELEA SCREEN <u>CLA-01</u>	
Container Size		Container Type #5		Container Condition	
85-gallon <input type="checkbox"/>	5-gallon <input type="checkbox"/>	Metal <input checked="" type="checkbox"/>	Glass <input type="checkbox"/>	Good <input type="checkbox"/>	
55-gallon <input type="checkbox"/>	Other <input type="checkbox"/>	Plastic <input type="checkbox"/>	Other <input type="checkbox"/>	Fair <input type="checkbox"/>	
30-gallon <input type="checkbox"/>	overpack <input type="checkbox"/>	Fiber <input type="checkbox"/>		Poor <input checked="" type="checkbox"/>	
AST, CLARIFIER				Notes: <u>OVERHEAD ENCLOSURE</u> <u>DETERIORATED SEVERELY</u>	
Container Opening		Container Markings		Container Color	
Ring Lid <input type="checkbox"/>	Tight <input type="checkbox"/>			Contents Color <u>BLACK OIL</u> layer 1	
Rung <input type="checkbox"/>	Rusted <input type="checkbox"/>			layer 2	
Pry Top <input type="checkbox"/>	Loose <input type="checkbox"/>			layer 3	
Other <input checked="" type="checkbox"/>	Off <input type="checkbox"/>				
OPEN TO AIR					
Container Contents Amount		Container Contents State		Screening Data	
Full <input type="checkbox"/>		Unknown <input type="checkbox"/>	Semi-solid <input type="checkbox"/>	pH _____	
Empty <input type="checkbox"/>		Solid <input type="checkbox"/>			
Partial <input checked="" type="checkbox"/>	<u>40</u> %	Liquid <input checked="" type="checkbox"/>			
Unknown <input type="checkbox"/>		Multiphase <input type="checkbox"/>			
Container Sampling Data				MultiRae uFID	
Date/Time Sampled <u>10/22/02 10:10</u>				Comments	
Sample ID <u>SI-CLA-01</u>					
Sampler <u>R. NOFFETT</u>					
Method <u>DIP JAR</u>					
COC# <u>14246 TRACE</u>					

HAZCAT INFORMATION

[illegible]

[illegible]

SITE NAME: Spill Inc., Site Assessment

TDD: S05-0209-005

TDD: S05-0209-005

Location AGAINST N WALL OF
PROCESS BUNG IN YARD

Container NO: SI- FIELD SCREEN-08


Container Size

Container Type

Container Condition

85-gallon		5-gallon
55-gallon		Other
30-gallon		overpack

Metal		Glass
Plastic		Other
Fiber		

Good	
Fair	
Poor	

Notes: AST LABELED "SPS 14"

Container Opening

Container Markings

"SRS 19"

Ring Lid		Tight
Rung		Rusted
Pry Top		Loose
Other		Off

Container Color	WHITE	layer 1
Contents Color	UNKNOWN	layer 2
		layer 3

Container	Contents	Amount
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
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95
96
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98
99
100

Container Contents State

Full		
Empty		
Partial		
Unknown		%

Unknown	8	Semi-solid	
Solid			
Liquid			
Multiphase			

pH 14

Screening Data

	VOC	CO	O2	LEL	H2S
MultiRae					
uFID					

Container Sampling Data

Comments

Date/Time Sampled	10/22/02 14:20
Sample ID	FIELD ONLY
Sampler	S. MEYER
Method	pH STRIP
COC#	N.A.

SAMPLED CRYSTALS THAT HAVE COLLECTED AT ACCESS VALVE TO TANK. CRYSTALS DISSOLVED IN MINIMAL DEIONIZED WATER TO TAKE PH READINGS.

HAZCAT INFORMATION

[illegible]

APPENDIX C
Sampling Forms

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-DRM-01

QA/QC (circle): field sample duplicate MS/MSD

Date: 10/22/02

Time: 1150

Location of Sample: PROCESS BLDG, DRUM RACK, BLUE DRUM

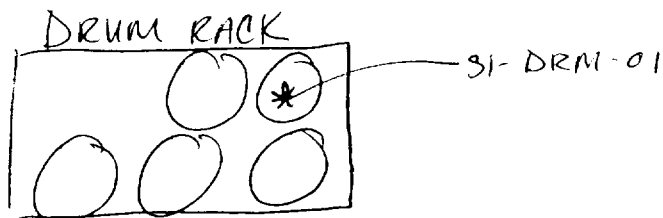
Type of Sample (circle): Grab Composite

Sample Matrix (circle): Oil % Oil =
Wastewater Composition =
Product Composition = SOLID, CRYSTALS
Drum Solids Composition =
Other

Parameters sampled for:

Oil

____ VOCs
____ Total Halogens
____ PCBs/VOCs
____ RCRA metals
____ Flashpoint/pH



Aqueous Samples / PRODUCT

7-8 pH (field test result)
Y TCLP VOCs
Y TCLP PCBs/VOCs
Y TCLP RCRA metals
Y Flashpoint/pH/Reactivity

Drum Solids

____ TCLP VOCs
____ TCLP PCBs/VOCs
____ TCLP RCRA metals
____ Flashpoint/pH/Reactivity

CO = 220 ppm (MULTI-RAE)

LABELED

"TERGITOL NP-12"

DANGER: CAUSES EYE BURNS

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-TOT-01

QA/QC (circle): field sample duplicate MS/MSD

Date: 10/22/02

Time: 1215

Location of Sample: SOUTHWEST CORNER OF PROCESS BLDG, TOTE

Type of Sample (circle): Grab Composite

Sample Matrix (circle):	Oil	% Oil =
	Wastewater	Composition =
	<u>Product</u>	Composition =
	Drum Solids	
	Other	Composition =

Parameters sampled for:

Oil

☐ VOCs
☐ Total Halogens
☐ PCBs/VOCs
☐ RCRA metals
☐ Flashpoint/pH

LABELED "MICROBATOR"

Aqueous Samples / PRODUCT

~11 pH (field test result)
X TCLP VOCs
X TCLP PCBs/VOCs
X TCLP RCRA metals
X Flashpoint/pH/Reactivity

Drum Solids

☐ TCLP VOCs
☐ TCLP PCBs/VOCs
☐ TCLP RCRA metals
☐ Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-TOT-01DP

QA/QC (circle): field sample duplicate MS/MSD

Date: 10/22/02

Time: 1215

Location of Sample: SW CORNER OF PROCESS BLDG, TOTE

Type of Sample (circle): Grab Composite

<u>Sample Matrix (circle):</u>	Oil	% Oil =
	Wastewater	Composition =
	<u>Product</u>	Composition =
	Drum Solids	
	Other	Composition =

Parameters sampled for:

Oil

LABELLED "MICROBATOR"

_____ VOCs
_____ Total Halogens
_____ PCBs/VOCs
_____ RCRA metals
_____ Flashpoint/pH

Aqueous Samples/PRODUCT

~11 pH (field test result)
✓ TCLP VOCs
✓ TCLP PCBs/VOCs
✓ TCLP RCRA metals
✓ Flashpoint/pH/Reactivity

Drum Solids

_____ TCLP VOCs
_____ TCLP PCBs/VOCs
_____ TCLP RCRA metals
_____ Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-TOT-02

QA/QC (circle): field sample duplicate MS/MSD

Date: 10/22/02

Time: 12:45

Location of Sample: SOUTH EDGE OF LOADING DOCK RAMP - TOTE

Type of Sample (circle): Grab Composite

Sample Matrix (circle): Oil % Oil = 100%
Wastewater Composition =
Product Composition =
Drum Solids
Other Composition =

Parameters sampled for:

Oil

✓ VOCs
✓ Total Halogens
✓ PCBs/VOCs
✓ RCRA metals
✓ Flashpoint/pH

CO = 135 ppm } Multigrade
VOC = 10 ppm } Inside Tote

Aqueous Samples

 pH (field test result)
 TCLP VOCs
 TCLP PCBs/VOCs
 TCLP RCRA metals
 Flashpoint/pH/Reactivity

"REC OIL"

FLAMMABLE

Drum Solids

 TCLP VOCs
 TCLP PCBs/VOCs
 TCLP RCRA metals
 Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-TOT-02DP

QA/QC (circle): field sample duplicate MS/MSD

Date: 10/22/02

Time: 12:45

Location of Sample: SOUTH EDGE OF LOADING DOCK RAMP-TOTE

Type of Sample (circle): Grab Composite

Sample Matrix (circle): Oil % Oil = 100%
Wastewater Composition =
Product Composition =
Drum Solids
Other Composition =

Parameters sampled for:

Oil

X VOCs
X Total Halogens
X PCBs/VOCs
X RCRA metals
X Flashpoint/pH

"REC OIL"

FLAMMABLE

Aqueous Samples

 pH (field test result)
 TCLP VOCs
 TCLP PCBs/VOCs
 TCLP RCRA metals
 Flashpoint/pH/Reactivity

CO = 135 ppm } Multitrack
VOC = 10 ppm } Inside Tote

Drum Solids

 TCLP VOCs
 TCLP PCBs/VOCs
 TCLP RCRA metals
 Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-LAB-01

QA/QC (circle): field sample duplicate MS/MSD

Date: 10/22/02

Time: 13:05

Location of Sample: MAIN BLDG, UPSTAIRS CLOSET, 5 GAL PAIL

Type of Sample (circle): Grab Composite

Sample Matrix (circle):	Oil	% Oil =
	Wastewater	Composition =
	<u>Product</u>	Composition =
	Drum Solids	
	Other	Composition =

Parameters sampled for:

Oil

_____ VOCs
_____ Total Halogens
_____ PCBs/VOCs
_____ RCRA metals
_____ Flashpoint/pH

ACETONE

VOC = 2000 ppm } MultikAE
LEL = 19% } Inside container

Aqueous Samples / PRODUCT

_____ pH (field test result)
✓ TCLP VOCs
✓ TCLP PCBs/VOCs
✓ TCLP RCRA metals
✓ Flashpoint/pH/Reactivity

Drum Solids

_____ TCLP VOCs
_____ TCLP PCBs/VOCs
_____ TCLP RCRA metals
_____ Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-LAB-02

QA/QC (circle):

field sample

duplicate

MS/MSD

Date: 10/22/02

Time: 13:30

Location of Sample: MAIN BLDG, UNSTAIRS CLOSET, 5 GALLON PAIL

Type of Sample (circle):

Grab

Composite

Sample Matrix (circle):

Oil

% Oil =

Wastewater

Composition =

Product

Composition =

Drum Solids

Other

Composition =

Parameters sampled for:

Oil

____ VOCs
____ Total Halogens
____ PCBs/VOCs
____ RCRA metals
____ Flashpoint/pH

"CARBOLINE" (LOOKS LIKE PAINT)
RUST ARMOR
HIGH GLOSS

Aqueous Samples

____ pH (field test result)
____ TCLP VOCs
____ TCLP PCBs/VOCs
____ TCLP RCRA metals
____ Flashpoint/pH/Reactivity

VOC = 90ppm } Inside pail
LEL = 0 } Multirae

Drum Solids

____ TCLP VOCs
____ TCLP PCBs/VOCs
____ TCLP RCRA metals
____ Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-LAB-03

(NOT ANALYZED,
SAMPLE DISPOSED)

QA/QC (circle):

field sample

duplicate

MS/MSD

Date: 10/22/02

Time: 13:40

Location of Sample: MAIN BLDG, UPSTAIRS LAB

Type of Sample (circle):

Grab

Composite

Sample Matrix (circle):

Oil

Wastewater

Product

Drum Solids

Other

% Oil =

Composition =

Composition =

Composition =

Parameters sampled for:

Oil

____ VOCs

____ Total Halogens

____ PCBs/VOCs

____ RCRA metals

____ Flashpoint/pH

HEXANE

Aqueous Samples / product

____ pH (field test result)

☒ TCLP VOCs

☒ TCLP PCBs/VOCs

☒ TCLP RCRA metals

☒ Flashpoint/pH/Reactivity

Drum Solids

____ TCLP VOCs

____ TCLP PCBs/VOCs

____ TCLP RCRA metals

____ Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-LAB-04

QA/QC (circle): field sample duplicate MS/MSD

Date: 10/22/02

Time: 13:45

Location of Sample: MAIN BLDG, UPSTAIRS LAB

Type of Sample (circle): Grab Composite

Sample Matrix (circle): Oil % Oil =
Wastewater Composition =
Product Composition =
Drum Solids
Other Composition =

Parameters sampled for:

Oil

☐ VOCs
☐ Total Halogens
☐ PCBs/VOCs
☐ RCRA metals
☐ Flashpoint/pH

"NITRIC ACID"

Aqueous Samples /PRODUCT

0-1 pH (field test result)

☐ TCLP VOCs
☐ TCLP PCBs/VOCs
☐ TCLP RCRA metals

☒ Flashpoint/pH/Reactivity

pH ONLY

Drum Solids

☐ TCLP VOCs
☐ TCLP PCBs/VOCs
☐ TCLP RCRA metals
☐ Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-LAB-05

QA/QC (circle):

field sample

duplicate

MS/MSD

Date: 10/22/02

Time: 13:50

Location of Sample: DRUM INSIDE MAN-DOOR ON WEST SIDE OF
MAIN BLDG. 55-GAL DRUM.

Type of Sample (circle): Grab

Composite

Sample Matrix (circle):

Oil

% Oil =

Wastewater

Composition =

Product

Composition =

Drum Solids

Other

Composition =

Parameters sampled for:

Oil

☐ VOCs
☐ Total Halogens
☐ PCBs/VOCs
☐ RCRA metals
☐ Flashpoint/pH

HEXANE

VOC = 778 ppm inside
drum
(MULTIRAE)

Aqueous Samples / PRODUCT

☐ pH (field test result)
☒ TCLP VOCs
☒ TCLP PCBs/VOCs
☒ TCLP RCRA metals
☒ Flashpoint/pH/Reactivity

Drum Solids

☐ TCLP VOCs
☐ TCLP PCBs/VOCs
☐ TCLP RCRA metals
☐ Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-SCP-01

QA/OC (circle):

field sample

duplicate

MS/MSD

Date: 10/22/02

Time: 14:30

Location of Sample: SCALE PIT, NORTH ACCESS, PROCESS BLDG.

Type of Sample (circle):

Grab

Composite

Sample Matrix (circle):

Oil

Wastewater

Product

Drum Solids

Other

% Oil = 30

Composition =

Composition =

Composition =

Parameters sampled for:

Oil

- ✓ VOCs
- ✓ Total Halogens
- ✓ PCBs/VOCs
- ✓ RCRA metals
- ✓ Flashpoint/pH

*Water decanted from
sample as much as possible.*

Aqueous Samples

- pH (field test result)
- TCLP VOCs
- TCLP PCBs/VOCs
- TCLP RCRA metals
- Flashpoint/pH/Reactivity

Drum Solids

- TCLP VOCs
- TCLP PCBs/VOCs
- TCLP RCRA metals
- Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-TA2-01

QA/QC (circle): field sample duplicate MS/MSD

Date: 10/22/02

Time: 1515

Location of Sample: AST #2, Surface Layer

Type of Sample (circle): Grab Composite

Sample Matrix (circle): Oil % Oil = 100%
Wastewater Composition =
Product Composition =
Drum Solids
Other Composition =

Parameters sampled for:

Oil

✓ VOCs
✓ Total Halogens
✓ PCBs/VOCs
✓ RCRA metals
✓ Flashpoint/pH

Aqueous Samples

 pH (field test result)
 TCLP VOCs
 TCLP PCBs/VOCs
 TCLP RCRA metals
 Flashpoint/pH/Reactivity

Drum Solids

 TCLP VOCs
 TCLP PCBs/VOCs
 TCLP RCRA metals
 Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-TA2-02

QA/QC (circle):

field sample

duplicate

MS/MSD

Date: 10/22/02

Time: 15:35

Location of Sample:

AST #2, SAMPLED WITH BUCKET AUGER
DOWN TO 22' BELOW HATCH HEIGHT

Type of Sample (circle):

Grab

Composite

Sample Matrix (circle):

Oil

Wastewater

Product

Drum Solids

Other

% Oil = 100%

Composition =

Composition =

Composition =

Parameters sampled for:

Oil

✓ VOCs
✓ Total Halogens
✓ PCBs/VOCs
✓ RCRA metals
✓ Flashpoint/pH

Aqueous Samples

 pH (field test result)
 TCLP VOCs
 TCLP PCBs/VOCs
 TCLP RCRA metals
 Flashpoint/pH/Reactivity

Drum Solids

 TCLP VOCs
 TCLP PCBs/VOCs
 TCLP RCRA metals
 Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-CLA-01

QA/QC (circle):

field sample

duplicate

MS/MSD

Date: 10/22/02

Time: 10:10

Location of Sample:

CLARIFIER #5 INSIDE CONTAINMENT AND
UNDER ENCLOSURE.

Type of Sample (circle):

Grab

Composite

Sample Matrix (circle):

Oil

Wastewater

Product

Drum Solids

Other

% Oil = 100%

Composition =

Composition =

Composition =

Parameters sampled for:

Oil

✓ VOCs
✓ Total Halogens
✓ PCBs/VOCs
✓ RCRA metals
✓ Flashpoint/pH

Aqueous Samples

 pH (field test result)
 TCLP VOCs
 TCLP PCBs/VOCs
 TCLP RCRA metals
 Flashpoint/pH/Reactivity

Drum Solids

 TCLP VOCs
 TCLP PCBs/VOCs
 TCLP RCRA metals
 Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): SI-TAC-01

QA/QC (circle):

field sample

duplicate

MS/MSD

Date: 10/22/02

Time: 16:30

Location of Sample: 'CAUSTIC SODA' AST IN PROCESS BLDG

Type of Sample (circle):

Grab

Composite

Sample Matrix (circle):

Oil

% Oil =

Wastewater

Composition =

Product

Composition =

Drum Solids

Other

Composition =

Parameters sampled for:

Oil

- ☐ VOCs
- ☐ Total Halogens
- ☐ PCBs/VOCs
- ☐ RCRA metals
- ☐ Flashpoint/pH

SCRAPED CRYSTALS OFF
UNLOADING VALVE ON TANK.

Aqueous Samples

/PRODUCT

- ☒ pH (field test result)
- ☒ TCLP VOCs
- ☐ TCLP PCBs/VOCs
- ☐ TCLP RCRA metals
- ☒ Flashpoint/pH/Reactivity

pH ONLY

Drum Solids

- ☐ TCLP VOCs
- ☐ TCLP PCBs/VOCs
- ☐ TCLP RCRA metals
- ☐ Flashpoint/pH/Reactivity

**Sybill, Inc. Site Assessment
Sample Form**

Sample Name (e.g. SI-DR, TA, SP or AP01-01): *SI-ASH-01*

QA/QC (circle): field sample duplicate MS/MSD

Date: *10/22/02*

Time: *16:45*

Location of Sample: *ASH PIT IN BOILER HOUSE*

Type of Sample (circle): Grab Composite

Sample Matrix (circle): Oil / SLUDGE % Oil =
 Wastewater Composition =
 Product Composition =
 Drum Solids
 Other Composition =

Parameters sampled for:

Oil
☒ VOCs
☒ Total Halogens
☒ PCBs/VOCs
☒ RCRA metals
☒ Flashpoint/pH

Aqueous Samples

☐ pH (field test result)
☐ TCLP VOCs
☐ TCLP PCBs/VOCs
☐ TCLP RCRA metals
☐ Flashpoint/pH/Reactivity

Drum Solids

☐ TCLP VOCs
☐ TCLP PCBs/VOCs
☐ TCLP RCRA metals
☐ Flashpoint/pH/Reactivity

APPENDIX D

Summary Tables of Sample Description and Analytical Results

U.S. EPA Analytical Results (22 October 2002)
Oil Sampling

Sybill Site Assessment
Detroit, Wayne County, Michigan

Parameter		Sample Identification			
		SI-TOT-02	SI-TOT-02DP	SI-TA2-01	SI-TA2-02
Labeling Information		Rec Oil "Flammable"	Rec Oil "Flammable" (duplicate)	None	None
Observations/field test (ppm)		Tote at south end of loading dock VOC = 10 CO = 135 LEL (%) = 0 H ₂ S = 0	Tote at south end of loading dock VOC = 10 CO = 135 LEL (%) = 0 H ₂ S = 0	AST #2, north side of Military Road - top layer	AST #2, north side of Military Road - sludge layer sampled using bucket auger 22-feet below hatch height
Drum description	Construction	Plastic Tote	Plastic Tote	Metal 250,000-gallon AST	Metal 250,000-gallon AST
	Volume	90%	90%	98%	98%
	Condition	Fair	Fair	Good	Good
Sample Matrix		Oil	Oil	Oil	Oil/Sludge
Parameter	Regulatory Limit				
<u>Total VOC:</u> (µg/kg)	NL	7,400	7,000	6,000 U	530 U
Benzene					
Toluene	NL	26,000	28,000	6,000 U	3,500
Ethyl benzene	NL	23,000	25,000	6,000 U	960
Xylenes (total)	NL	130,000	130,000	18,000 U	6,600
Styrene	NL	160,000	170,000	6,000 U	530 U
<u>Total SVOCs:</u> (mg/kg)	NL	37,000	38,000	250 U	250 U
Naphthalene					
2- Methylnaphthalene	NL	130,000	140,000	250 U	250 U

U.S. EPA Analytical Results (continued)
Oil Sampling

Parameter	Regulatory Limit	Sample Location			
		SI-TOT-02	SI-TOT-02DP	SI-TA2-01	SI-TA2-02
Acenaphthene	NL	3,600	3,700	250 U	500 U
Fluorene	NL	1,700	1,700	250 U	500 U
Phenanthrene	NL	1,300	1,300	25 U	50 U
Total Metals: (mg/Kg)	5	0.2 U	0.2 U	15	26
Arsenic					
Barium	NL	1.0 U	1.0 U	36	140
Cadmium	2	0.05 U	0.05 U	0.17	0.29
Chromium	10	0.88 U	0.87 U	7.3	35
Lead	100	1.0 U	1.0 U	12	35
Silver	NL	0.5 U	0.5 U	0.5 U	0.85
Lead	NL	0.2 U	0.2 U	0.2 U	0.2 U
Total Halogens: (µg/Kg)	4,000,000	80	277	1,278	461
Characteristics of Hazardous Waste: pH	- < 2, > 12.5	6.69	6.9	4.59	6.41
Flash:	< 140 °F	> 200 °F	> 200 °F	> 200 °F	> 200 °F

Key:

PID = Photo ionization Detector

VOCs = Volatile organic compounds

SVOCs = Semi volatile organic compounds

mg/Kg = milligrams per kilogram

µg/Kg = micrograms per kilogram

TCLP = Toxicity Characteristic Leachate Procedure

U = result is below method detection limit

Bolded values indicates that parameter exceeded criteria level

mg/L = milligrams per liter

< = Less than

> = Greater than

NL = Not listed

N/A = Not Analyzed

AST = aboveground storage tank

Source: Trace Labs, Muskegon, Michigan and CT&E Labs, Ludington, Michigan, under START analytical TDD number S05-0210-003.

U.S. EPA Analytical Results (22 October 2002)
Oil Sampling

Sybill Site Assessment
Detroit, Wayne County, Michigan

Parameter		Sample Identification		
		SI-CLA-01	SI-ASH-01	SI-SCP-01
Labeling Information		None	None	None
Observations/field test (ppm)		Enclosed clarifier #5 - overhead enclosure deteriorated	Boiler House Ash Pit	Floor Sump/Scale Pit in Process Building. Decanted water from sample.
Drum description	Construction	Metal AST/Clarifier	Cement Pit	Cement Floor Sump/Scale Pit
	Volume	40%	50%	unknown
	Condition	Poor	Fair	unknown/underground
Sample Matrix		Oil	Oil/Sludge	Oil
Parameter	Regulatory Limit			
Total VOC: (µg/Kg) Benzene	NL	750 U	910	700 U
Toluene	NL	750 U	49,000	700 U
ethyl benzene	NL	750 U	5,400	890
xylene (total)	NL	2,300 U	26,000	3,500
Styrene	NL	750 U	550 U	700 U
Total SVOCs: (mg/L) Naphthalene	NL	250 U	500 U	500 U
2-Methylnaphthalene	NL	250 U	500 U	500 U
Acenaphthene	NL	250 U	500 U	500 U

U.S. EPA Analytical Results (continued)
Oil Sampling

Parameter	Regulatory Limit	Sample Location		
		SI-CLA-01	SI-ASH-01	SI-SCP-01
Fluorene	NL	250 U	500 U	500 U
Phenanthrene	NL	25 U	50 U	50 U
<u>Total Metals:</u> (mg/Kg)	5	0.23	1.2	1.2
Arsenic				
Barium	NL	2.9	13	150
Cadmium	2	0.05 U	0.21	1.2
Chromium	10	3	6.3	35
Lead	100	5.9	14	81
Silver	NL	0.5 U	0.5 U	0.5 U
Lead	NL	0.2 U	0.2 U	0.2
<u>Total Halogens:</u> (µg/Kg)	4,000,000	4,043	1,804	728
<u>Characteristics of Hazardous Waste:</u> pH	- < 2, > 12.5	4.38	6.08	7.96
<u>Flash:</u>	< 140 °F	> 200 °F	70 °F	170 °F

Key:

PID = Photo ionization Detector	mg/L = milligrams per liter
VOCs = Volatile organic compounds	< = Less than
SVOCs = Semi volatile organic compounds	> = Greater than
mg/Kg = milligrams per kilogram	NL = Not listed
µg/Kg = micrograms per kilogram	N/A = Not Analyzed
TCLP = Toxicity Characteristic Leachate Procedure	AST = aboveground storage tank
U = result is below method detection limit	
Bolded values indicates that parameter exceeded criteria level	

Source: Trace Labs, Muskegon, Michigan and CT&E Labs, Ludington, Michigan, under START analytical TDD number S05-0210-003.

U.S. EPA Analytical Results (22 October 2002)
Waste Product Sampling

Sybill Site Assessment
Detroit, Wayne County, Michigan

Parameter		Sample Identification			
		SI-DRM-01	SI-TOT-01	SI-TOT-01DP	SI-LAB-01
Labeling Information		"Tergitol NP-12" Danger: Causes Eye Burns Interstate Chemical Company, Inc.	"Microbator"	"Microbator"	"Acetone"
Observations/field test (ppm)		Drum in rack, top row on right VOC = 0 CO = 220 LEL (%) = 0 H ₂ S = 0 pH = 7-8	Plastic Tote in southwest corner of Process Building VOC = 0 CO = 0 LEL (%) = 0 H ₂ S = 0 pH = 11	Plastic Tote in southwest corner of Process Building VOC = 0 CO = 0 LEL (%) = 0 H ₂ S = 0 pH = 11	Drum in Main Building, upstairs closet VOC = 2,000 CO = 0 LEL (%) = 19 H ₂ S = 0
Drum description	Construction	Plastic 55-gallon	Plastic Tote	Plastic Tote	Metal 5-gallon
	Volume	Partial	90%	90%	Partial
	Condition	Fair	Fair	Fair	Fair
Sample Matrix		Product - solids and crystals	Product	Product	Product
Parameter	Regulatory Limit				
TCLP VOC: (mg/L) Benzene	0.5	100U	1.0U	5.0U	1.2
Methyl ethyl ketone	0.5	500U	5.0U	25U	2,300

U.S. EPA Analytical Results (continued)
Waste Product Sampling

Parameter	Regulatory Limit	Sample Location			
		SI-DRM-01	SI-TOT-01	SI-TOT-01DP	SI-LAB-01
<u>Characteristics of Hazardous Waste:</u> pH	< 2, > 12.5	4.8	6.54	7.38	3.88
<u>Flash:</u>	< 140 °F	> 200 °F	> 200 °F	140 °F	100 °F

Key:

- PID = Photo ionization Detector
- VOCs = Volatile organic compounds
- > = Greater than
- < = Less than
- TCLP = Toxicity Characteristic Leachate Procedure
- LEL = lower explosive limit
- N/A = Not Analyzed
- U = result is below method detection limit
- mg/L = milligrams per liter
- AST = aboveground storage tank

Source: Trace Labs, Muskegon, Michigan and CT&E Labs, Ludington, Michigan, under START analytical TDD number S05-0210-003.

U.S. EPA Analytical Results (22 October 2002)
Waste Product Sampling

Sybill Site Assessment
Detroit, Wayne County, Michigan

Parameter		Sample Identification			
		SI-LAB-02	SI-LAB-04	SI-LAB-05	SI-TAC-01
Labeling Information		Carboline Rust Armor High Gloss	Nitric Acid	Hexane	Caustic Soda
Observations/field test (ppm)		Drum in Main Building, upstairs closet VOC = 90 CO = 0 LEL (%) = 0 H ₂ S = 0	Main Building, upstairs lab pH = 0-1	Main Building, first floor. Hand pump attached to drum VOC = 778 CO = 0 LEL (%) = 0 H ₂ S = 0	AST in Process Building
Drum description	Construction	Metal 5-gallon	Glass 2.5 Liter	55-gallon metal drum	AST Approximately 4,000-gallon
	Volume	Full	60%	Partial	unknown
	Condition	Fair	Fair	Fair	Fair
Sample Matrix		Product	Product	Product	Product
Parameter	Regulatory Limit				
<u>TCLP VOC:</u> (mg/L) Benzene	0.5	0.1U	NA	1.1	NA
Methyl ethyl ketone	0.5	77	NA	5.0U	NA

U.S. EPA Analytical Results (continued) Waste Product Sampling					
Parameter	Regulatory Limit	Sample Location			
		SI-LAB-02	SI-LAB-04	SI-LAB-05	SI-LAB-01
<u>Characteristics of Hazardous Waste:</u> pH	< 2, > 12.5	4.05	0	4.01	12.97
Flash:	< 140 °F	95 °F	NA	75 °F	NA

Key:

PID = Photo ionization Detector

VOCs = Volatile organic compounds

> = Greater than

< = Less than

TCLP = Toxicity Characteristic Leachate Procedure

LEL = lower explosive limit

N/A = Not Analyzed

U = result is below method detection limit

mg/L = milligrams per liter

AST = aboveground storage tank

Source:

Trace Labs, Muskegon, Michigan and CT&E Labs, Ludington, Michigan, under START analytical TDD number S05-0210-003.

APPENDIX E

Analytical Data

one 231.773.5998
t:free 800.733.5998
fax 231.773.6537

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444 2673
www.trace-labs.com



Assurance
Accuracy
Accountability

November 11, 2002

Ms. Linda Korobka
Weston Solutions Inc.
2501 Jolly Rd., Suite 100
Okemos, MI 48864

RE: Trace ID CK248

Dear Ms. Korobka:

Enclosed are your analytical results.

This information was examined through Trace's validation process to ensure that all requirements for quality and completeness were satisfied. All reported analytical results were obtained in accordance with the methods referenced on the reports. Every practical effort was made to meet the reporting limit specifications for this work. However, if there are exceptions, they will be noted at the bottom of the appropriate report page.

Please note that where surrogates are reported as "NA" in samples with Trace IDs CK248-01, 02, and 03, it is because the matrix of the sample either reacted with the surrogate or prevented the surrogate from being extracted. All problems with surrogates are matrix related.

Thank you for working with Trace. If you have questions regarding this data, please contact Ann Preston, our client services manager, at (231) 773-5998, ext. 224.

Sincerely,

Ray V. Buhl
Laboratory Manager

RVB/bmc
Enclosures

Date: <u>10/23/02</u>	Client Name: <u>Weston</u>	# of Coolers: <u>2</u>
HPN #: _____	Project Name: <u>Sybil</u>	Cooler #s: <u>TR2</u>
Project # <u>EX48 CK208</u>	Logged in by: <u>[Signature]</u>	Cooler #s: _____

Cooler Receipt

Trace courier <input type="checkbox"/>	Hand delivered <input checked="" type="checkbox"/>	Name of delivery person: _____
Cooler/samples delivered by: _____	Commercial courier <input type="checkbox"/>	Name of courier service: _____
Did cooler come with a bill of lading?	No <input checked="" type="checkbox"/>	Way Bill or Tracking #: _____
	Yes <input type="checkbox"/>	
IC Seals present and intact on cooler?	No <input type="checkbox"/>	Custody seals signed by: _____
	Yes <input type="checkbox"/>	Client COC number: _____
		Type of packing in cooler: _____

Coolant and Temperature

Type of Coolant Used		Temperature (as taken in Cooler)	
	Yes No	Date: <u>10/23/02</u>	Time: <u>7 PM</u>
Slurry w/ crushed, cubed, or chip ice?	<input type="checkbox"/> <input type="checkbox"/>	Temperature Blank: <u>5.4</u>	°C
Multiple bags of ice around samples?	<input checked="" type="checkbox"/> <input type="checkbox"/>	Range of 3 samples: _____	°C
Ice Packs/ Blue Ice	<input type="checkbox"/> <input type="checkbox"/>	Melt Water: _____	°C
No Coolant Present:	<input type="checkbox"/>	Ice still present upon receipt: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

General

	Yes	No	NA
COC taped to inside of cooler lid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All bottles arrived unbroken with labels in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Each sample is in a sealed plastic bag?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Labels filled out completely?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All bottle labels agree with Chain of Custody (COC)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient sample to run tests requested?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH checked and samples at correct pH?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Correct preservative added to samples?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Soil volatiles received and appropriate check in form completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Air bubbles absent from VOAs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC filled out properly and signed by client?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC signed in by TRACE sample custodian?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was project manager called and samples discussed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Contact: _____ Date: _____

Notes: Sample S1-TAC-01 was noted
on the C-O-C as a liquid, it arrived in
a solid state. 10-24-02

Phone: 231-773-5998
 Toll Free: 800-733-5998
 Fax: 231-773-0537

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673
 traceanalytical@mad.scientist.com



Date: <u>10/23/02</u>	Client Name: <u>Weston</u>	# of Coolers: <u>2</u>
HPN #: _____	Project Name: <u>SX-BILL</u>	Cooler #s: <u>TR1</u>
Project #: <u>CK248</u>	Logged in by: <u>AS Smith</u>	Cooler #s: _____

Cooler Receipt

Trace courier <input type="checkbox"/>		
Cooler/samples delivered by:	Hand delivered <input checked="" type="checkbox"/>	Name of delivery person: _____
Commercial courier <input type="checkbox"/>		Name of courier service: _____
Did cooler come with a bill of lading?	No <input checked="" type="checkbox"/>	Way Bill or Tracking # _____
	Yes <input type="checkbox"/>	
	No <input checked="" type="checkbox"/>	
IC Seals present and intact on cooler?	Yes <input type="checkbox"/>	Custody seals signed by _____
		Client COC number _____
		Type of packing in cooler: _____

Coolant and Temperature

Type of Coolant Used		Temperature (as taken in Cooler)
	Yes No	Date: <u>10/23/02</u> Time: <u>7PM</u>
Slurry w/ crushed, cubed, or chip ice?	<input type="checkbox"/> <input type="checkbox"/>	Temperature Blank _____ °C
Multiple bags of ice around samples?	<input checked="" type="checkbox"/> <input type="checkbox"/>	Range of 3 samples _____ °C
Ice Packs/ Blue Ice	<input type="checkbox"/> <input type="checkbox"/>	Melt Water _____ °C
No Coolant Present:	<input type="checkbox"/> <input type="checkbox"/>	Ice still present upon receipt: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

General

	Yes	No	NA
COC taped to inside of cooler lid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All bottles arrived unbroken with labels in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Each sample is in a sealed plastic bag?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Labels filled out completely?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All bottle labels agree with Chain of Custody (COC)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient sample to run tests requested?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH checked and samples at correct pH?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Correct preservative added to samples?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Soil volatiles received and appropriate check in form completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Air bubbles absent from VOAs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC filled out properly and signed by client?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC signed in by TRACE sample custodian?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was project manager called and samples discussed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Contact: _____

Date: _____

Notes: _____

phone 231 733 5998
toll free 800 733 5998
fax 231 733 0537

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-4673
traceanalytical@mad-scientist.com

TRACE

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ANALYSIS REQUESTED

ANALYSIS REQUESTED

4)			
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* MUST ACHIEVE REPORTABLE VALUES TO DOCUMENT INTERIAR

RECEIVED BY	DATE	TIME	Item #	RELEASED BY	RECEIVED BY	DATE	TIME
<i>Quinn M. Doan</i>	<i>11/24/02</i>	<i>1902</i>	3)				
			4)				

In describing this agreement the aliant submited the conditions of the terms of the agreement as listed on the annexed side

Page 7 of 7

Possible Health Hazard

phone 231.773.5998
toll-free 800.733.5998
fax 231.773.6537

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673
www.trace-labs.com



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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-DRM-01
BATCH ID: VOC110401W

TRACE ID: CK248-01
REPORT DATE: 11/06/02
ANALYSIS DATE: 11/04/02
ANALYST: gmr
D.L. MULTIPLIER: 2000
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Solid
SAMPLER: sm

EPA 1311/8260 TCLP VOLATILES	RESULT mg/L	REPORTING LIMIT mg/L
Benzene	U Δ	* 100
Carbon tetrachloride	U	* 100
Chlorobenzene	U	* 100
Chloroform	U	* 100
Methyl ethyl ketone	U	* 500
1,4-Dichlorobenzene	U	* 100
1,2-Dichloroethane	U	* 100
1,1-Dichloroethene	U	* 100
Tetrachloroethene	U	* 100
Trichloroethene	U	* 100
Vinyl chloride	U	* 100
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	95	70 - 133
Toluene-d8	113	76 - 125
4-Bromofluorobenzene	94	71 - 123
1,2-Dichlorobenzene-d4	97	72 - 123

* Because of the nature of the sample matrix, a smaller aliquot than usual was analyzed, resulting in a raised reporting limit.

gmr
11/19/02

U = Undetected at reporting limits



Ms. Linda Korobka
 Weston Solutions Inc.

CLIENT ID: Sybill
 SAMPLE ID: S1-TOT-01
 BATCH ID: VOC110102W

TRACE ID: CK248-02
 REPORT DATE: 11/06/02
 ANALYSIS DATE: 11/01/02
 ANALYST: gmr
 D.L. MULTIPLIER: 20
 SAMPLE DATE: 10/22/02
 SAMPLE RECEIVED: 10/23/02
 SAMPLE TYPE: Liquid
 SAMPLER: sm

EPA 1311/8260 TCLP VOLATILES	RESULT mg/L	REPORTING LIMIT mg/L
Benzene	U	* 1.0
Carbon tetrachloride	U	* 1.0
Chlorobenzene	U	* 1.0
Chloroform	U	* 1.0
Methyl ethyl ketone	U	* 5.0
1,4-Dichlorobenzene	U	* 1.0
1,2-Dichloroethane	U	* 1.0
1,1-Dichloroethene	U	* 1.0
Tetrachloroethene	U [✓]	* 1.0
Trichloroethene	U	* 1.0
Vinyl chloride	U	* 1.0

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	91	70 - 133
Toluene-d8	110	76 - 125
4-Bromofluorobenzene	93	71 - 123
1,2-Dichlorobenzene-d4	100	72 - 123

* Because of the nature of the sample matrix, a smaller aliquot than usual was analyzed, resulting in a raised reporting limit.

Handwritten signature
 11/14/02

phone 231.773.5998
toll-free 800.733.5998
fax 231.773.6537

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673
www.trace-labs.com



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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TOT-01DP
BATCH ID: VOC110102W

TRACE ID: CK248-03
REPORT DATE: 11/06/02
ANALYSIS DATE: 11/01/02
ANALYST: gmr
D.L. MULTIPLIER: 100
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

EPA 1311/8260 TCLP VOLATILES	RESULT mg/L	REPORTING LIMIT mg/L
Benzene	U ⁵	* 5.0
Carbon tetrachloride	U	* 5.0
Chlorobenzene	U ⁵	* 5.0
Chloroform	U	* 5.0
Methyl ethyl ketone	U	* 25
1,4-Dichlorobenzene	U ⁵	* 5.0
1,2-Dichloroethane	U	* 5.0
1,1-Dichloroethene	U	* 5.0
Tetrachloroethene	U ⁵	* 5.0
Trichloroethene	U	* 5.0
Vinyl chloride	U	* 5.0

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	96	70 - 133
Toluene-d8	111	76 - 125
4-Bromofluorobenzene	94	71 - 123
1,2-Dichlorobenzene-d4	100	72 - 123

* Because of the nature of the sample matrix, a smaller aliquot than usual was analyzed, resulting in a raised reporting limit.

L. Korobka
11/14/02

U = Undetected at reporting limits



Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-LAB-01
BATCH ID: VOC103101W

TRACE ID: CK248-04
REPORT DATE: 11/06/02
ANALYSIS DATE: 11/01/02
ANALYST: gmr
D.L. MULTIPLIER: 20
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

EPA 1311/8260 TCLP VOLATILES	RESULT mg/L	REPORTING LIMIT mg/L
Benzene	1.2	* 1.0
Carbon tetrachloride	U	* 1.0
Chlorobenzene	U	* 1.0
Chloroform	U	* 1.0
Methyl ethyl ketone	2300	* 580
1,4-Dichlorobenzene	U	* 1.0
1,2-Dichloroethane	U	* 1.0
1,1-Dichloroethene	U	* 1.0
Tetrachloroethene	U	* 1.0
Trichloroethene	U	* 1.0
Vinyl chloride	U	* 1.0

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	97	70 - 133
Toluene-d8	90	76 - 125
4-Bromofluorobenzene	88	71 - 123
1,2-Dichlorobenzene-d4	98	72 - 123

* The reporting limit was raised due to a dilution because of high analyte concentrations.

L. Korobka
11/11/02



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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
 SAMPLE ID: S1-LAB-02
 BATCH ID: VOC103101W

TRACE ID: CK248-05
 REPORT DATE: 11/06/02
 ANALYSIS DATE: 11/01/02
 ANALYST: gmr
 D.L. MULTIPLIER: 2
 SAMPLE DATE: 10/22/02
 SAMPLE RECEIVED: 10/23/02
 SAMPLE TYPE: Liquid
 SAMPLER: sm

EPA 1311/8260 TCLP VOLATILES	RESULT mg/L	REPORTING LIMIT mg/L
Benzene	U	* 0.10
Carbon tetrachloride	U	* 0.10
Chlorobenzene	U	* 0.10
Chloroform	U	* 0.10
Methyl ethyl ketone	77	** 25
1,4-Dichlorobenzene	U	* 0.10
1,2-Dichloroethane	U	* 0.10
1,1-Dichloroethene	U	* 0.10
Tetrachloroethene	U [✓]	* 0.10
Trichloroethene	U	* 0.10
Vinyl chloride	U	* 0.10
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	112	70 - 133
Toluene-d8	97	76 - 125
4-Bromofluorobenzene	93	71 - 123
1,2-Dichlorobenzene-d4	102	72 - 123

* Because of the nature of the sample matrix, a smaller aliquot than usual was analyzed, resulting in a raised reporting limit.

** The reporting limit was raised due to a dilution because of high analyte concentrations.

L Korobka
11/14/02



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Ms. Linda Korobka
 Weston Solutions Inc.

CLIENT ID: Sybill
 SAMPLE ID: S1-LAB-05
 BATCH ID: VOC103101W

TRACE ID: CK248-07
 REPORT DATE: 11/06/02
 ANALYSIS DATE: 10/31/02
 ANALYST: gmr
 D.L. MULTIPLIER: 20
 SAMPLE DATE: 10/22/02
 SAMPLE RECEIVED: 10/23/02
 SAMPLE TYPE: Liquid
 SAMPLER: sm

EPA 1311/8260 TCLP VOLATILES	RESULT mg/L	REPORTING LIMIT mg/L
Benzene	1.1	* 1.0
Carbon tetrachloride	U	* 1.0
Chlorobenzene	U	* 1.0
Chloroform	U	* 1.0
Methyl ethyl ketone	U	* 5.0
1,4-Dichlorobenzene	U	* 1.0
1,2-Dichloroethane	U	* 1.0
1,1-Dichloroethene	U	* 1.0
Tetrachloroethene	U	* 1.0
Trichloroethene	U	* 1.0
Vinyl chloride	U	* 1.0

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	88	70 - 133
Toluene-d8	100	76 - 125
4-Bromofluorobenzene	86	71 - 123
1,2-Dichlorobenzene-d4	99	72 - 123

* The reporting limit was raised due to a dilution because of high analyte concentrations.

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 11/19/02



Ms. Linda Korobka
 Weston Solutions Inc.

CLIENT ID: Sybill
 SAMPLE ID: Trip Blanks
 BATCH ID: VOC103101W

TRACE ID: CK248-09
 REPORT DATE: 11/06/02
 ANALYSIS DATE: 10/31/02
 ANALYST: gmr
 D.L. MULTIPLIER: 1
 SAMPLE DATE: NA
 SAMPLE RECEIVED: 10/23/02
 SAMPLE TYPE: Liquid
 SAMPLER: sm

EPA 1311/8260 TCLP VOLATILES	RESULT mg/L	REPORTING LIMIT mg/L
Benzene	U	0.050
Carbon tetrachloride	U	0.050
Chlorobenzene	U	0.050
Chloroform	U	0.050
Methyl ethyl ketone	U	0.25
1,4-Dichlorobenzene	U	0.050
1,2-Dichloroethane	U	0.050
1,1-Dichloroethene	U	0.050
Tetrachloroethene	U	0.050
Trichloroethene	U	0.050
Vinyl chloride	U	0.050

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	99	70 - 133
Toluene-d8	108	76 - 125
4-Bromofluorobenzene	87	71 - 123
1,2-Dichlorobenzene-d4	96	72 - 123

L. Korobka
 11/19/02



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Ms. Linda Korobka
 Weston Solutions Inc.

CLIENT ID: Sybill
 SAMPLE ID: S1-TOT-02
 BATCH ID: VOC103101W

TRACE ID: CK248-10
 REPORT DATE: 11/06/02
 ANALYSIS DATE: 11/02/02
 ANALYST: gmr
 D.L. MULTIPLIER: 190
 SAMPLE DATE: 10/22/02
 SAMPLE RECEIVED: 10/23/02
 SAMPLE TYPE: Oil
 SAMPLER: sm

EPA 8260 VOLATILES METHANOL PRESERVED TARGET COMPOUND LIST	RESULT µg/kg	REPORTING LIMIT µg/kg
Chloromethane	U	* 4800
Vinyl chloride	U	* 4800
Bromomethane	U	* 4800
Chloroethane	U	* 4800
Acetone	U	* 38000
1,1-Dichloroethene	U	* 4800
Methylene chloride	UJ	* 4800
1,2-Dichloroethene (total)	U	* 9500
1,1-Dichloroethane	U	* 4800
2-Butanone	U	* 9500
Chloroform	U	* 4800
1,1,1-Trichloroethane	U	* 4800
Carbon tetrachloride	U	* 4800
Benzene	7400	* 4800
1,2-Dichloroethane	U	* 4800
Trichloroethene	U	* 4800
1,2-Dichloropropane	U	* 4800
Bromodichloromethane	U	* 4800
cis-1,3-Dichloropropene	U	* 4800
2-Hexanone	U	* 9500
Toluene	26000	* 4800
trans-1,3-Dichloropropene	U	* 4800
1,1,2-Trichloroethane	U	* 4800
4-Methyl-2-pentanone	U	* 9500
Tetrachloroethene	U	* 4800
Dibromochloromethane	U	* 4800
Chlorobenzene	U	* 4800
Ethyl benzene	23000	* 4800
Xylenes (total)	130000	* 14000
Styrene	160000	* 4800
Bromoform	U	* 4800
1,1,2,2-Tetrachloroethane	U	* 4800
Carbon disulfide	U	* 9500

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	92	70 - 133
Toluene-d8	105	76 - 125
4-Bromofluorobenzene	88	71 - 123
1,2-Dichlorobenzene-d4	103	72 - 123

* The reporting limit was raised due to a dilution because of high analyte concentrations.

L Korobka
 11/19/02



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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TOT-02DP
BATCH ID: VOC110102W

TRACE ID: CK248-11
REPORT DATE: 11/06/02
ANALYSIS DATE: 11/02/02
ANALYST: gmr
D.L. MULTIPLIER: 220
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8260 VOLATILES METHANOL PRESERVED TARGET COMPOUND LIST	RESULT µg/kg	REPORTING LIMIT µg/kg
Chloromethane	U	* 5500
Vinyl chloride	U	* 5500
Bromomethane	U	* 5500
Chloroethane	U	* 5500
Acetone	U	* 22000
1,1-Dichloroethene	U	* 5500
Methylene chloride	U I	* 5500
1,2-Dichloroethene (total)	U	* 11000
1,1-Dichloroethane	U	* 5500
2-Butanone	U	* 11000
Chloroform	U	* 5500
1,1,1-Trichloroethane	U	* 5500
Carbon tetrachloride	U	* 5500
Benzene	7000 J	* 5500
1,2-Dichloroethane	U	* 5500
Trichloroethene	U	* 5500
1,2-Dichloropropane	U	* 5500
Bromodichloromethane	U	* 5500
cis-1,3-Dichloropropene	U	* 5500
2-Hexanone	U	* 11000
Toluene	28000 J	* 5500
trans-1,3-Dichloropropene	U	* 5500
1,1,2-Trichloroethane	U	* 5500
4-Methyl-2-pentanone	U	* 11000
Tetrachloroethene	U	* 5500
Dibromochloromethane	U	* 5500
Chlorobenzene	U	* 5500
Ethyl benzene	25000 J	* 5500
Xylenes (total)	130000 J	* 17000
Styrene	170000 J	* 5500
Bromoform	U	* 5500
1,1,2,2-Tetrachloroethane	U	* 5500
Carbon disulfide	U	* 11000

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	97	70 - 133
Toluene-d8	110	76 - 125
4-Bromofluorobenzene	98	71 - 123
1,2-Dichlorobenzene-d4	101	72 - 123

* The reporting limit was raised due to a dilution because of high analyte concentrations.

U = Undetected at reporting limits

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11/19/02



Ms. Linda Korobka
 Weston Solutions Inc.

CLIENT ID: Sybill
 SAMPLE ID: S1-TA2-01
 BATCH ID: VOC103101W

TRACE ID: CK248-12
 REPORT DATE: 11/06/02
 ANALYSIS DATE: 11/04/02
 ANALYST: gmr
 D.L. MULTIPLIER: 240
 SAMPLE DATE: 10/22/02
 SAMPLE RECEIVED: 10/23/02
 SAMPLE TYPE: Oil
 SAMPLER: sm

EPA 8260 VOLATILES METHANOL PRESERVED TARGET COMPOUND LIST	RESULT µg/kg	REPORTING LIMIT µg/kg
Chloromethane	U	* 6000
Vinyl chloride	U	* 6000
Bromomethane	U	* 6000
Chloroethane	U	* 6000
Acetone	U	* 240000
1,1-Dichloroethene	U	* 6000
Methylene chloride	U ⁵	* 6000
1,2-Dichloroethene (total)	U	* 12000
1,1-Dichloroethane	U	* 6000
2-Butanone	U	* 12000
Chloroform	U	* 6000
1,1,1-Trichloroethane	U	* 6000
Carbon tetrachloride	U	* 6000
Benzene	U	* 6000
1,2-Dichloroethane	U ⁵	* 6000
Trichloroethene	U	* 6000
1,2-Dichloropropane	U	* 6000
Bromodichloromethane	U	* 6000
cis-1,3-Dichloropropene	U	* 6000
2-Hexanone	U	* 12000
Toluene	U	* 6000
trans-1,3-Dichloropropene	U	* 6000
1,1,2-Trichloroethane	U	* 6000
4-Methyl-2-pentanone	U	* 12000
Tetrachloroethene	U ⁵	* 6000
Dibromochloromethane	U	* 6000
Chlorobenzene	U	* 6000
Ethyl benzene	U	* 6000
Xylenes (total)	U	* 18000
Styrene	U	* 6000
Bromoform	U	* 6000
1,1,2,2-Tetrachloroethane	U	* 6000
Carbon disulfide	U	* 12000

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	98	70 - 133
Toluene-d8	105	76 - 125
4-Bromofluorobenzene	85	71 - 123
1,2-Dichlorobenzene-d4	95	72 - 123

* Because of the nature of the sample matrix, a smaller aliquot than usual was analyzed, resulting in a raised reporting limit.

Handwritten signature: Harold 11/14/02



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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TA2-02
BATCH ID: VOC110401W

TRACE ID: CK248-13
REPORT DATE: 11/06/02
ANALYSIS DATE: 11/04/02
ANALYST: gmr
D.L. MULTIPLIER: 21
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8260 VOLATILES METHANOL PRESERVED TARGET COMPOUND LIST	RESULT µg/kg	REPORTING LIMIT µg/kg
Chloromethane	U	* 530
Vinyl chloride	U	* 530
Bromomethane	U	* 530
Chloroethane	U	* 530
Acetone	U	* 2100
1,1-Dichloroethene	U	* 530
Methylene chloride	U ₅	* 530
1,2-Dichloroethene (total)	U	* 1100
1,1-Dichloroethane	U	* 530
2-Butanone	U	* 1100
Chloroform	U	* 530
1,1,1-Trichloroethane	U	* 530
Carbon tetrachloride	U	* 530
Benzene	U	* 530
1,2-Dichloroethane	U ₅	* 530
Trichloroethene	U	* 530
1,2-Dichloropropane	U	* 530
Bromodichloromethane	U	* 530
cis-1,3-Dichloropropene	U	* 530
2-Hexanone	U	2500
Toluene	3500	* 530
trans-1,3-Dichloropropene	U	* 530
1,1,2-Trichloroethane	U	* 530
4-Methyl-2-pentanone	U	2500
Tetrachloroethene	U ₅	* 530
Dibromochloromethane	U	* 530
Chlorobenzene	U	* 530
Ethyl benzene	960	* 530
Xylenes (total)	6600	* 1600
Styrene	U	* 530
Bromoform	U	* 530
1,1,2,2-Tetrachloroethane	U	* 530
Carbon disulfide	U	* 1100

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	72	70 - 133
Toluene-d8	115	76 - 125
4-Bromofluorobenzene	91	71 - 123
1,2-Dichlorobenzene-d4	101	72 - 123

* The reporting limit was raised due to a dilution because of high analyte concentrations.

U = Undetected at reporting limits

L Korobka
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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-CLA-01
BATCH ID: VOC110401W

TRACE ID: CK248-14
REPORT DATE: 11/06/02
ANALYSIS DATE: 11/04/02
ANALYST: gmr
D.L. MULTIPLIER: 30
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8260 VOLATILES METHANOL PRESERVED TARGET COMPOUND LIST	RESULT µg/kg	REPORTING LIMIT µg/kg
Chloromethane	U	* 750
Vinyl chloride	U	* 750
Bromomethane	U	* 750
Chloroethane	U	* 750
Acetone	U	* 3000
1,1-Dichloroethene	U	* 750
Methylene chloride	U ⁵	* 750
1,2-Dichloroethene (total)	U	* 1500
1,1-Dichloroethane	U	* 750
2-Butanone	U	* 1500
Chloroform	U	* 750
1,1,1-Trichloroethane	U	* 750
Carbon tetrachloride	U	* 750
Benzene	U	* 750
1,2-Dichloroethane	U ⁵	* 750
Trichloroethene	U	* 750
1,2-Dichloropropane	U	* 750
Bromodichloromethane	U	* 750
cis-1,3-Dichloropropene	U	* 750
2-Hexanone	U	2500
Toluene	U	* 750
trans-1,3-Dichloropropene	U	* 750
1,1,2-Trichloroethane	U	* 750
4-Methyl-2-pentanone	U	2500
Tetrachloroethene	U ⁵	* 750
Dibromochloromethane	U	* 750
Chlorobenzene	U	* 750
Ethyl benzene	U	* 750
Xylenes (total)	U	* 2300
Styrene	U	* 750
Bromoform	U	* 750
1,1,2,2-Tetrachloroethane	U	* 750
Carbon disulfide	U	* 1500

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	80	70 - 133
Toluene-d8	115	76 - 125
4-Bromofluorobenzene	92	71 - 123
1,2-Dichlorobenzene-d4	98	72 - 123

* Because of the nature of the sample matrix, a smaller aliquot than usual was analyzed, resulting in a raised reporting limit.

U = Undetected at reporting limits

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Ms. Linda Korobka
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CLIENT ID: Sybill
 SAMPLE ID: S1-ASH-01
 BATCH ID: VOC110401W

TRACE ID: CK248-15
 REPORT DATE: 11/06/02
 ANALYSIS DATE: 11/04/02
 ANALYST: gmr
 D.L. MULTIPLIER: 22
 SAMPLE DATE: 10/22/02
 SAMPLE RECEIVED: 10/23/02
 SAMPLE TYPE: Oil
 SAMPLER: sm

EPA 8260 VOLATILES METHANOL PRESERVED TARGET COMPOUND LIST	RESULT µg/kg	REPORTING LIMIT µg/kg
Chloromethane	U	* 550
Vinyl chloride	U	* 550
Bromomethane	U	* 550
Chloroethane	U	* 550
Acetone	U	* 2200
1,1-Dichloroethene	U	* 550
Methylene chloride	U [✓]	* 550
1,2-Dichloroethene (total)	U	* 1100
1,1-Dichloroethane	U	* 550
2-Butanone	U	* 1100
Chloroform	U	* 550
1,1,1-Trichloroethane	U	* 550
Carbon tetrachloride	U	* 550
Benzene	910	* 550
1,2-Dichloroethane	U [✓]	* 550
Trichloroethene	U	* 550
1,2-Dichloropropane	U	* 550
Bromodichloromethane	U	* 550
cis-1,3-Dichloropropene	U	* 550
2-Hexanone	U	2500
Toluene	49000	* 550
trans-1,3-Dichloropropene	U	* 550
1,1,2-Trichloroethane	U	* 550
4-Methyl-2-pentanone	U	2500
Tetrachloroethene	U [✓]	* 550
Dibromochloromethane	U	* 550
Chlorobenzene	U	* 550
Ethyl benzene	5400	* 550
Xylenes (total)	26000	* 1700
Styrene	U	* 550
Bromoform	U	* 550
1,1,2,2-Tetrachloroethane	U	* 550
Carbon disulfide	U	* 1100
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	78	70 - 133
Toluene-d8	113	76 - 125
4-Bromofluorobenzene	93	71 - 123
1,2-Dichlorobenzene-d4	99	72 - 123

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* The reporting limit was raised due to a dilution because of high analyte concentrations.

U = Undetected at reporting limits

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-SCP-01
BATCH ID: VOC110401W

TRACE ID: CK248-16
REPORT DATE: 11/06/02
ANALYSIS DATE: 11/04/02
ANALYST: gmr
D.L. MULTIPLIER: 28
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8260 VOLATILES METHANOL PRESERVED TARGET COMPOUND LIST	RESULT µg/kg	REPORTING LIMIT µg/kg
Chloromethane	U	* 700
Vinyl chloride	U	* 700
Bromomethane	U	* 700
Chloroethane	U	* 700
Acetone	U	* 2800
1,1-Dichloroethene	U	* 700
Methylene chloride	U	* 700
1,2-Dichloroethene (total)	U	* 1400
1,1-Dichloroethane	U	* 700
2-Butanone	U	* 1400
Chloroform	U	* 700
1,1,1-Trichloroethane	U	* 700
Carbon tetrachloride	U	* 700
Benzene	U	* 700
1,2-Dichloroethane	U	* 700
Trichloroethene	U	* 700
1,2-Dichloropropane	U	* 700
Bromodichloromethane	U	* 700
cis-1,3-Dichloropropene	U	* 700
2-Hexanone	U	2500
Toluene	U	* 700
trans-1,3-Dichloropropene	U	* 700
1,1,2-Trichloroethane	U	* 700
4-Methyl-2-pentanone	U	2500
Tetrachloroethene	U	* 700
Dibromochloromethane	U	* 700
Chlorobenzene	U	* 700
Ethyl benzene	890	* 700
Xylenes (total)	3500	* 2100
Styrene	U	* 700
Bromoform	U	* 700
1,1,2,2-Tetrachloroethane	U	* 700
Carbon disulfide	U	* 1400

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
1,2-Dichloroethane-d4	77	70 - 133
Toluene-d8	113	76 - 125
4-Bromofluorobenzene	91	71 - 123
1,2-Dichlorobenzene-d4	101	72 - 123

* The reporting limit was raised due to a dilution because of high analyte concentrations.

U = Undetected at reporting limits

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11/9/02



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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
 SAMPLE ID: Trip Blank
 BATCH ID: VOC103101W

TRACE ID: CK248-17
 REPORT DATE: 11/06/02
 ANALYSIS DATE: 10/31/02
 ANALYST: gmr
 D.L. MULTIPLIER: 1
 SAMPLE DATE: NA
 SAMPLE RECEIVED: 10/23/02
 SAMPLE TYPE: Water
 SAMPLER: sm

EPA 8260 VOLATILES TARGET COMPOUND LIST	RESULT µg/L	REPORTING LIMIT µg/L
Chloromethane	U	1.0
Vinyl chloride	U	1.0
Bromomethane	U	1.0
Chloroethane	U	1.0
Acetone	U	25
1,1-Dichloroethene	U	1.0
Methylene chloride	U	5.0
1,2-Dichloroethene (total)	U	1.0
1,1-Dichloroethane	U	1.0
2-Butanone	U	25
Chloroform	U	1.0
1,1,1-Trichloroethane	U	1.0
Carbon tetrachloride	U	1.0
Benzene	U	1.0
1,2-Dichloroethane	U	1.0
Trichloroethene	U	1.0
1,2-Dichloropropane	U	1.0
Bromodichloromethane	U	1.0
cis-1,3-Dichloropropene	U	1.0
2-Hexanone	U	50
Toluene	U	1.0
trans-1,3-Dichloropropene	U	1.0
1,1,2-Trichloroethane	U	1.0
4-Methyl-2-pentanone	U	50
Tetrachloroethene	U	1.0
Dibromochloromethane	U	1.0
Chlorobenzene	U	1.0
Ethyl benzene	U	1.0
Xylenes (total)	U	3.0
Styrene	U	1.0
Bromoform	U	1.0
1,1,2,2-Tetrachloroethane	U	1.0
Carbon disulfide	U	5.0

SURROGATE PERFORMANCE

RECOVERY %

CONTROL LIMIT %

1,2-Dichloroethane-d4	103	70 - 133
Toluene-d8	108	76 - 125
4-Bromofluorobenzene	90	71 - 123
1,2-Dichlorobenzene-d4	97	72 - 123

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-DRM-01
BATCH ID: PCB1025010

TRACE ID: CK248-01
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/25/02
ANALYST: jp
D.L. MULTIPLIER: 1
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Solid
SAMPLER: sm

EPA 8082 PCBs	RESULT mg/kg	REPORTING LIMIT mg/kg
Aroclor-1016	U	1.0
Aroclor-1221	U	1.0
Aroclor-1232	U	1.0
Aroclor-1242	U	1.0
Aroclor-1248	U	1.0
Aroclor-1254	U	1.0
Aroclor-1260	U	1.0
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
Decachlorobiphenyl	84	58 - 127
Tetrachloro-m-xylene	78	53 - 128

J. Krabbe
11/19/02

U = Undetected at reporting limits



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Ms. Linda Korobka
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CLIENT ID: Sybill
SAMPLE ID: S1-TOT-01
BATCH ID: PCB102501W

TRACE ID: CK248-02
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/28/02
EXTRACTION DATE: 10/25/02
ANALYST: jp
D.L. MULTIPLIER: 10
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

EPA 8082 PCBs	RESULT µg/L	REPORTING LIMIT µg/L
Aroclor-1016	U 5	1.0
Aroclor-1221	U	1.0
Aroclor-1232	U	1.0
Aroclor-1242	U	1.0
Aroclor-1248	U	1.0
Aroclor-1254	U	1.0
Aroclor-1260	U	1.0

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
Decachlorobiphenyl	48	32 - 95
Tetrachloro-m-xylene	* 36	38 - 86

* The secondary surrogate (tetrachloro-m-xylene) recovery for this sample fell outside the laboratory established control limits. The primary surrogate (decachlorobiphenyl) percent recovery was in control. No data requires qualification.

J Korobka
11/19/02

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Ms. Linda Korobka
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CLIENT ID: Sybill
SAMPLE ID: S1-TOT-01DP
BATCH ID: PCB102501W

TRACE ID: CK248-03
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/28/02
EXTRACTION DATE: 10/25/02
ANALYST: jp
D.L. MULTIPLIER: 10
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

EPA 8082 PCBs	RESULT µg/L	REPORTING LIMIT µg/L
Aroclor-1016	U	1.0
Aroclor-1221	U	1.0
Aroclor-1232	U	1.0
Aroclor-1242	U	1.0
Aroclor-1248	U	1.0
Aroclor-1254	U	1.0
Aroclor-1260	U	1.0
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
Decachlorobiphenyl	76	32 - 95
Tetrachloro-m-xylene	61	38 - 86

J. Knott
11/19/02

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Ms. Linda Korobka
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CLIENT ID: Sybill
SAMPLE ID: S1-LAB-01
BATCH ID: PCB1025010

TRACE ID: CK248-04
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/30/02
EXTRACTION DATE: 10/25/02
ANALYST: jp
D.L. MULTIPLIER: 1
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

EPA 8082 PCBs	RESULT mg/kg	REPORTING LIMIT mg/kg
Aroclor-1016	U ⁵	1.0
Aroclor-1221	U	1.0
Aroclor-1232	U	1.0
Aroclor-1242	U	1.0
Aroclor-1248	U	1.0
Aroclor-1254	U	1.0
Aroclor-1260	U ⁵	1.0
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
Decachlorobiphenyl	83	58 - 127
Tetrachloro-m-xylene	76	53 - 128

L Korobka
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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-LAB-02
BATCH ID: PCB1025010

TRACE ID: CK248-05
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/25/02
ANALYST: jp
D.L. MULTIPLIER: 1
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

EPA 8082 PCBs	RESULT mg/kg	REPORTING LIMIT mg/kg
Aroclor-1016	US	1.0
Aroclor-1221	U	1.0
Aroclor-1232	U	1.0
Aroclor-1242	U	1.0
Aroclor-1248	U	1.0
Aroclor-1254	U	1.0
Aroclor-1260	US	1.0
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
Decachlorobiphenyl	85	58 - 127
Tetrachloro-m-xylene	80	53 - 128

L Korobka
11/14/02

U = Undetected at reporting limits



Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-LAB-05
BATCH ID: PCB1025010

TRACE ID: CK248-07
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/30/02
EXTRACTION DATE: 10/25/02
ANALYST: jp
D.L. MULTIPLIER: 1
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

EPA 8082 PCBs	RESULT mg/kg	REPORTING LIMIT mg/kg
Aroclor-1016	UJ	1.0
Aroclor-1221	U	1.0
Aroclor-1232	U	1.0
Aroclor-1242	U	1.0
Aroclor-1248	U	1.0
Aroclor-1254	U	1.0
Aroclor-1260	UJ	1.0
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
Decachlorobiphenyl	82	58 - 127
Tetrachloro-m-xylene	91	53 - 128

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TOT-02
BATCH ID: PCB1025010

TRACE ID: CK248-10
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/30/02
EXTRACTION DATE: 10/25/02
ANALYST: jp
D.L. MULTIPLIER: 1
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8082 PCBs	RESULT mg/kg	REPORTING LIMIT mg/kg
Aroclor-1016	U	1.0
Aroclor-1221	U	1.0
Aroclor-1232	U	1.0
Aroclor-1242	U	1.0
Aroclor-1248	U	1.0
Aroclor-1254	U	1.0
Aroclor-1260	U	1.0

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
Decachlorobiphenyl	86	58 - 127
Tetrachloro-m-xylene	78	53 - 128

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U = Undetected at reporting limits

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fax 231.773.6537 Muskegon, MI 49444-2673
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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TOT-02DP
BATCH ID: PCB1025010

TRACE ID: CK248-11
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/30/02
EXTRACTION DATE: 10/25/02
ANALYST: jp
D.L. MULTIPLIER: 1
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8082 PCBs	RESULT mg/kg	REPORTING LIMIT mg/kg
Aroclor-1016	U	1.0
Aroclor-1221	U	1.0
Aroclor-1232	U	1.0
Aroclor-1242	U	1.0
Aroclor-1248	U	1.0
Aroclor-1254	U	1.0
Aroclor-1260	U	1.0
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
Decachlorobiphenyl	81	58 - 127
Tetrachloro-m-xylene	72	53 - 128

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11/19/02

U = Undetected at reporting limits

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TOT-01
BATCH ID: BNA102801W

TRACE ID: CK248-02
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/28/02
ANALYST: avl
D.L. MULTIPLIER: 5
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

EPA 1311/8270 TCLP SEMI-VOLATILE ORGANICS	RESULT mg/L	REPORTING LIMIT mg/L
Pyridine	U	0.10
2-Methylphenol	* U _L	0.10
3/4-Methylphenol	* U _L	0.10
Hexachloroethane	U	0.10
Nitrobenzene	U	0.10
Hexachloro-1,3-butadiene	U	0.10
2,4,6-Trichlorophenol	* U _L	0.10
2,4,5-Trichlorophenol	* U _L	0.10
2,4-Dinitrotoluene	U	0.10
Hexachlorobenzene	U	0.10
Pentachlorophenol	* U _L	0.25
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
2-Fluorophenol	* NA	22 - 63
Phenol-d5	* NA	16 - 45
Nitrobenzene-d5	82	32 - 125
2-Fluorobiphenyl	95	33 - 115
2,4,6-Tribromophenol	* NA	25 - 122
p-Terphenyl-d14	86	62 - 112

* The surrogate was out of control low when compared to the control limits. The results for the acid compounds must be considered estimated.

NA = Not available

L. Korobka
11/11/02

U = Undetected at reporting limits



Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TOT-01DP
BATCH ID: BNA102801W

TRACE ID: CK248-03
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/28/02
ANALYST: avl
D.L. MULTIPLIER: 1
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

EPA 1311/8270 TCLP SEMI-VOLATILE ORGANICS	RESULT mg/L	REPORTING LIMIT mg/L
Pyridine	U	0.10
2-Methylphenol	* U ₃	0.10
3/4-Methylphenol	* U ₃	0.10
Hexachloroethane	U	0.10
Nitrobenzene	U	0.10
Hexachloro-1,3-butadiene	U	0.10
2,4,6-Trichlorophenol	* U ₃	0.10
2,4,5-Trichlorophenol	* U ₃	0.10
2,4-Dinitrotoluene	U	0.10
Hexachlorobenzene	U	0.10
Pentachlorophenol	* U ₃	0.10
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
2-Fluorophenol	* NA	22 - 63
Phenol-d5	* NA	16 - 45
Nitrobenzene-d5	75	32 - 125
2-Fluorobiphenyl	87	33 - 115
2,4,6-Tribromophenol	* NA	25 - 122
p-Terphenyl-d14	78	62 - 112

* The surrogate was out of control low when compared to the control limits. The results for the acid compounds must be considered estimated.
NA = Not available

L Korobka
11/14/02



Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-SCP-01
BATCH ID: PCB1025010

TRACE ID: CK248-16
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/25/02
ANALYST: jp
D.L. MULTIPLIER: 1
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8082 PCBs	RESULT mg/kg	REPORTING LIMIT mg/kg
Aroclor-1016	U	1.0
Aroclor-1221	U	1.0
Aroclor-1232	U	1.0
Aroclor-1242	U	1.0
Aroclor-1248	U	1.0
Aroclor-1254	U	1.0
Aroclor-1260	U	1.0
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
Decachlorobiphenyl	101	58 - 127
Tetrachloro-m-xylene	97	53 - 128

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-DRM-01
BATCH ID: BNA102801W

TRACE ID: CK248-01
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/28/02
ANALYST: avl
D.L. MULTIPLIER: 10
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Solid
SAMPLER: sm

EPA 1311/8270 TCLP SEMI-VOLATILE ORGANICS	RESULT mg/L	REPORTING LIMIT mg/L
Pyridine	* U	* 0.20
2-Methylphenol	* U	* 0.20
3/4-Methylphenol	* U	* 0.20
Hexachloroethane	* U	* 0.20
Nitrobenzene	* U	* 0.20
Hexachloro-1,3-butadiene	* U	* 0.20
2,4,6-Trichlorophenol	* U	* 0.20
2,4,5-Trichlorophenol	* U	* 0.20
2,4-Dinitrotoluene	* U	* 0.20
Hexachlorobenzene	* U	* 0.20
Pentachlorophenol	* U	* 0.50
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
2-Fluorophenol	* NA	22 - 63
Phenol-d5	* NA	16 - 45
Nitrobenzene-d5	* NA	32 - 125
2-Fluorobiphenyl	* NA	33 - 115
2,4,6-Tribromophenol	* NA	25 - 122
p-Terphenyl-d14	* NA	62 - 112

* The surrogate was out of control low when compared to the control limits.
The result and reporting limit must be considered estimated.
NA = Not available

L Korobka
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2241 Black Creek Road
Muskegon, MI 49444-2673
www.trace-labs.com



Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-CLA-01
BATCH ID: PCB1025010

TRACE ID: CK248-14
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/25/02
ANALYST: jp
D.L. MULTIPLIER: 4.5
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8082 PCBs	RESULT mg/kg	REPORTING LIMIT mg/kg
Aroclor-1016	U	4.5
Aroclor-1221	U	4.5
Aroclor-1232	U	4.5
Aroclor-1242	U	4.5
Aroclor-1248	U	4.5
Aroclor-1254	U	4.5
Aroclor-1260	U	4.5

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
Decachlorobiphenyl	* NA	58 - 127
Tetrachloro-m-xylene	* NA	53 - 128

* A dilution was required on this sample. Consequently, surrogate recoveries are not available.

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U = Undetected at reporting limits



Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-ASH-01
BATCH ID: PCB1025010

TRACE ID: CK248-15
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/25/02
ANALYST: jp
D.L. MULTIPLIER: 1
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8082 PCBs	RESULT mg/kg	REPORTING LIMIT mg/kg
Aroclor-1016	U	1.0
Aroclor-1221	U	1.0
Aroclor-1232	U	1.0
Aroclor-1242	U	1.0
Aroclor-1248	U	1.0
Aroclor-1254	U	1.0
Aroclor-1260	U	1.0
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
Decachlorobiphenyl	86	58 - 127
Tetrachloro-m-xylene	94	53 - 128

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TA2-01
BATCH ID: PCB1025010

TRACE ID: CK248-12
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/25/02
ANALYST: jp
D.L. MULTIPLIER: 5
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8082 PCBs	RESULT mg/kg	REPORTING LIMIT mg/kg
Aroclor-1016	U	5.0
Aroclor-1221	U	5.0
Aroclor-1232	U	5.0
Aroclor-1242	U	5.0
Aroclor-1248	U	5.0
Aroclor-1254	U	5.0
Aroclor-1260	U	5.0

SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
Decachlorobiphenyl	* NA	58 - 127
Tetrachloro-m-xylene	* NA	53 - 128

* A dilution of 1:5 or greater was required on this sample. Consequently, surrogate recoveries are not available.

J. Kordell
11/19/02

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fax 231.773.6537 Muskegon, MI 49444-2673
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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TA2-02
BATCH ID: PCB1025010

TRACE ID: CK248-13
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/25/02
ANALYST: jp
D.L. MULTIPLIER: 1
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8082 PCBs	RESULT mg/kg	REPORTING LIMIT mg/kg
Aroclor-1016	U	1.0
Aroclor-1221	U	1.0
Aroclor-1232	U	1.0
Aroclor-1242	U	1.0
Aroclor-1248	U	1.0
Aroclor-1254	U	1.0
Aroclor-1260	U	1.0
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
Decachlorobiphenyl	77	58 - 127
Tetrachloro-m-xylene	84	53 - 128

L. Korobka
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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-LAB-01
BATCH ID: BNA1025010

TRACE ID: CK248-04
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/30/02
EXTRACTION DATE: 10/25/02
ANALYST: avl
D.L. MULTIPLIER: 1
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

EPA 1311/8270 TCLP WASTE DILUTION SEMI-VOLATILE ORGANICS	RESULT mg/L	REPORTING LIMIT mg/L
Pyridine	U	25
2-Methylphenol	U	25
3/4-Methylphenol	U	25
Hexachloroethane	U	25
Nitrobenzene	U	25
Hexachloro-1,3-butadiene	U	25
2,4,6-Trichlorophenol	U	25
2,4,5-Trichlorophenol	U	25
2,4-Dinitrotoluene	U	25
Hexachlorobenzene	U	25
Pentachlorophenol	U	25
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
2-Fluorophenol	88	70 - 130
Phenol-d5	79	70 - 130
Nitrobenzene-d5	83	70 - 130
2-Fluorobiphenyl	97	70 - 130
2,4,6-Tribromophenol	* 55	70 - 130
p-Terphenyl-d14	90	70 - 130

* One of the acid surrogate recoveries was outside the control limits. Since the other two acid surrogates were within the control limits, no data requires qualification.

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U = Undetected at reporting limits

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fax 231.773.6537

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Ms. Linda Korobka
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CLIENT ID: Sybill
SAMPLE ID: S1-LAB-02
BATCH ID: BNA102801W

TRACE ID: CK248-05
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/28/02
ANALYST: avl
D.L. MULTIPLIER: 5
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

EPA 1311/8270 TCLP SEMI-VOLATILE ORGANICS	RESULT mg/L	REPORTING LIMIT mg/L
Pyridine	U	0.10
2-Methylphenol	U	0.10
3/4-Methylphenol	U	0.10
Hexachloroethane	U	0.10
Nitrobenzene	U	0.10
Hexachloro-1,3-butadiene	U	0.10
2,4,6-Trichlorophenol	U	0.10
2,4,5-Trichlorophenol	U	0.10
2,4-Dinitrotoluene	U	0.10
Hexachlorobenzene	U	0.10
Pentachlorophenol	U	0.25
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
2-Fluorophenol	63	22 - 63
Phenol-d5	39	16 - 45
Nitrobenzene-d5	93	32 - 125
2-Fluorobiphenyl	96	33 - 115
2,4,6-Tribromophenol	77	25 - 122
p-Terphenyl-d14	90	62 - 112

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CLIENT ID: Sybill
SAMPLE ID: S1-LAB-05
BATCH ID: BNA1025010

TRACE ID: CK248-07
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/30/02
EXTRACTION DATE: 10/25/02
ANALYST: avl
D.L. MULTIPLIER: 1
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

EPA 1311/8270 TCLP WASTE DILUTION SEMI-VOLATILE ORGANICS	RESULT mg/L	REPORTING LIMIT mg/L
Pyridine	U	25
2-Methylphenol	U	25
3/4-Methylphenol	U	25
Hexachloroethane	U	25
Nitrobenzene	U	25
Hexachloro-1,3-butadiene	U	25
2,4,6-Trichlorophenol	U	25
2,4,5-Trichlorophenol	U	25
2,4-Dinitrotoluene	U	25
Hexachlorobenzene	U	25
Pentachlorophenol	U	25
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
2-Fluorophenol	88	70 - 130
Phenol-d5	77	70 - 130
Nitrobenzene-d5	81	70 - 130
2-Fluorobiphenyl	96	70 - 130
2,4,6-Tribromophenol	* 57	70 - 130
p-Terphenyl-d14	88	70 - 130

* One of the acid surrogate recoveries was outside the control limits. Since the other two acid surrogates were within the control limits, no data requires qualification.

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TOT-02
BATCH ID: BNA1025010

TRACE ID: CK248-10
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/25/02
ANALYST: avl
D.L. MULTIPLIER: 10
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8270 MASS SPECTROMETRY SEMI-VOLATILE ORGANICS WASTE DILUTION TARGET COMPOUND LIST	RESULT mg/kg	REPORTING LIMIT mg/kg
bis(2-Chloroethyl)ether	U	250
2-Chlorophenol	U	250
Phenol	U	250
1,3-Dichlorobenzene	U	250
1,4-Dichlorobenzene	U	250
1,2-Dichlorobenzene	U	250
Benzyl alcohol	U	250
bis(2-Chloroisopropyl)ether	U	250
2-Methylphenol	U	250
3/4-Methylphenol	U	250
N-Nitroso-di-n-propylamine	U	250
Hexachloroethane	U	250
Nitrobenzene	U	250
Isophorone	U	250
2-Nitrophenol	U	250
2,4-Dimethylphenol	U	250
bis(2-Chloroethoxy)methane	U	250
Benzoic acid	U	500
1,2,4-Trichlorobenzene	U	250
2,4-Dichlorophenol	U	250
Naphthalene	37000	2500
4-Chloroaniline	U	250
Hexachloro-1,3-butadiene	U	250
4-Chloro-3-methylphenol	U	250
2-Methylnaphthalene	130000	5000
Hexachlorocyclopentadiene	U	500
2,4,6-Trichlorophenol	U	250
2,4,5-Trichlorophenol	U	250
2-Chloronaphthalene	U	250
2-Nitroaniline	U	250
Dimethylphthalate	U	250
Acenaphthylene	U	250
2,6-Dinitrotoluene	U	250
3-Nitroaniline	U	250
Acenaphthene	3600	250
Dibenzofuran	U	250
2,4-Dinitrotoluene	U	250
4-Nitrophenol	U	2000
2,4-Dinitrophenol	U	2000
Diethylphthalate	U	250
Fluorene	1700	250

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 TRACE ID: CK248-10

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EPA 8270 MASS SPECTROMETRY SEMI-VOLATILE ORGANICS TARGET COMPOUND LIST	RESULT mg/kg	REPORTING LIMIT mg/kg
4-Chlorophenyl-phenylether	U	25
4-Nitroaniline	U	25
4,6-Dinitro-2-methylphenol	U	50
N-Nitrosodiphenylamine	U	25
4-Bromophenyl-phenylether	U	25
Hexachlorobenzene	U	25
Pentachlorophenol	U	50
Phenanthrene	1300	25
Anthracene	U	25
Carbazole	U	25
Di-n-butylphthalate	U	25
Fluoranthene	U	25
Pyrene	U	25
Butylbenzylphthalate	U	25
Benzo(a)anthracene	U	25
Chrysene	U	25
3,3'-Dichlorobenzidine	U	25
bis(2-Ethylhexyl)phthalate	U	25
Di-n-octylphthalate	U	25
Benzo(b)fluoranthene	U	25
Benzo(k)fluoranthene	U	25
Benzo(a)pyrene	U	25
Indeno(1,2,3-cd)pyrene	U	25
Dibenzo(a,h)anthracene	U	25
Benzo(g,h,i)perylene	U	25
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
2-Fluorophenol	* NA	70 - 130
Phenol-d5	* NA	70 - 130
Nitrobenzene-d5	* NA	70 - 130
2-Fluorobiphenyl	* NA	70 - 130
2,4,6-Tribromophenol	* NA	70 - 130
p-Terphenyl-d14	* NA	70 - 130

* A dilution of 1:10 or greater was required on this sample. Consequently, surrogate recoveries are not available.

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TOT-02DP
BATCH ID: BNA1025010

TRACE ID: CK248-11
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/25/02
ANALYST: avl
D.L. MULTIPLIER: 10
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8270 MASS SPECTROMETRY SEMI-VOLATILE ORGANICS WASTE DILUTION TARGET COMPOUND LIST	RESULT mg/kg	REPORTING LIMIT mg/kg
bis(2-Chloroethyl)ether	U	250
2-Chlorophenol	U	250
Phenol	U	250
1,3-Dichlorobenzene	U	250
1,4-Dichlorobenzene	U	250
1,2-Dichlorobenzene	U	250
Benzyl alcohol	U	250
bis(2-Chloroisopropyl)ether	U	250
2-Methylphenol	U	250
3/4-Methylphenol	U	250
N-Nitroso-di-n-propylamine	U	250
Hexachloroethane	U	250
Nitrobenzene	U	250
Isophorone	U	250
2-Nitrophenol	U	250
2,4-Dimethylphenol	U	250
bis(2-Chloroethoxy)methane	U	250
Benzoic acid	U	500
1,2,4-Trichlorobenzene	U	250
2,4-Dichlorophenol	U	250
Naphthalene	38000	2500
4-Chloroaniline	U	250
Hexachloro-1,3-butadiene	U	250
4-Chloro-3-methylphenol	U	250
2-Methylnaphthalene	140000	5000
Hexachlorocyclopentadiene	U	500
2,4,6-Trichlorophenol	U	250
2,4,5-Trichlorophenol	U	250
2-Chloronaphthalene	U	250
2-Nitroaniline	U	250
Dimethylphthalate	U	250
Acenaphthylene	U	250
2,6-Dinitrotoluene	U	250
3-Nitroaniline	U	250
Acenaphthene	3700	250
Dibenzofuran	U	250
2,4-Dinitrotoluene	U	250
4-Nitrophenol	U	2000
2,4-Dinitrophenol	U	2000
Diethylphthalate	U	250
Fluorene	1700	250

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CLIENT: Weston Solutions Inc.
 TRACE ID: CK248-11

PAGE 2

EPA 8270 MASS SPECTROMETRY SEMI-VOLATILE ORGANICS TARGET COMPOUND LIST	RESULT mg/kg	REPORTING LIMIT mg/kg
4-Chlorophenyl-phenylether	U	250
4-Nitroaniline	U	250
4,6-Dinitro-2-methylphenol	U	500
N-Nitrosodiphenylamine	U	25
4-Bromophenyl-phenylether	U	250
Hexachlorobenzene	U	250
Pentachlorophenol	U	500
Phenanthrene	1300	25
Anthracene	U	250
Carbazole	U	250
Di-n-butylphthalate	U	250
Fluoranthene	U	250
Pyrene	U	250
Butylbenzylphthalate	U	250
Benzo(a)anthracene	U	250
Chrysene	U	250
3,3'-Dichlorobenzidine	U	250
bis(2-Ethylhexyl)phthalate	U	250
Di-n-octylphthalate	U	250
Benzo(b)fluoranthene	U	250
Benzo(k)fluoranthene	U	250
Benzo(a)pyrene	U	250
Indeno(1,2,3-cd)pyrene	U	250
Dibenzo(a,h)anthracene	U	250
Benzo(g,h,i)perylene	U	250
SURROGATE PERFORMANCE		
2-Fluorophenol	* NA	70 - 130
Phenol-d5	* NA	70 - 130
Nitrobenzene-d5	* NA	70 - 130
2-Fluorobiphenyl	* NA	70 - 130
2,4,6-Tribromophenol	* NA	70 - 130
p-Terphenyl-d14	* NA	70 - 130

* A dilution of 1:10 or greater was required on this sample. Consequently, surrogate recoveries are not available.

Z/Koalid
 11/19/02

U = Undetected at reporting limits

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Muskegon, MI 49444-2673
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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TA2-01
BATCH ID: BNA1025010

TRACE ID: CK248-12
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/30/02
EXTRACTION DATE: 10/25/02
ANALYST: avl
D.L. MULTIPLIER: 10
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8270 MASS SPECTROMETRY SEMI-VOLATILE ORGANICS WASTE DILUTION TARGET COMPOUND LIST	RESULT mg/kg	REPORTING LIMIT mg/kg
bis(2-Chloroethyl)ether	U	250
2-Chlorophenol	U	250
Phenol	U	250
1,3-Dichlorobenzene	U	250
1,4-Dichlorobenzene	U	250
1,2-Dichlorobenzene	U	250
Benzyl alcohol	U	250
bis(2-Chloroisopropyl)ether	U	250
2-Methylphenol	U	250
3/4-Methylphenol	U	250
N-Nitroso-di-n-propylamine	U	250
Hexachloroethane	U	250
Nitrobenzene	U	250
Isophorone	U	250
2-Nitrophenol	U	250
2,4-Dimethylphenol	U	250
bis(2-Chloroethoxy)methane	U	250
Benzoic acid	U	500
1,2,4-Trichlorobenzene	U	250
2,4-Dichlorophenol	U	250
Naphthalene	U	250
4-Chloroaniline	U	250
Hexachloro-1,3-butadiene	U	250
4-Chloro-3-methylphenol	U	250
2-Methylnaphthalene	U	250
Hexachlorocyclopentadiene	U	500
2,4,6-Trichlorophenol	U	250
2,4,5-Trichlorophenol	U	250
2-Chloronaphthalene	U	250
2-Nitroaniline	U	250
Dimethylphthalate	U	250
Acenaphthylene	U	250
2,6-Dinitrotoluene	U	250
3-Nitroaniline	U	250
Acenaphthene	U	250
Dibenzofuran	U	250
2,4-Dinitrotoluene	U	250
4-Nitrophenol	U	2000
2,4-Dinitrophenol	U	2000
Diethylphthalate	U	250
Fluorene	U	250

U = Undetected at reporting limits

Z. Korobka
11/11/02

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fax 231-773-6537

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CLIENT: Weston Solutions Inc.
TRACE ID: CK248-12

PAGE 2

EPA 8270 MASS SPECTROMETRY SEMI-VOLATILE ORGANICS TARGET COMPOUND LIST	RESULT mg/kg	REPORTING LIMIT mg/kg
4-Chlorophenyl-phenylether	U	250
4-Nitroaniline	U	250
4,6-Dinitro-2-methylphenol	U	500
N-Nitrosodiphenylamine	U	25
4-Bromophenyl-phenylether	U	250
Hexachlorobenzene	U	250
Pentachlorophenol	U	500
Phenanthrene	U	25
Anthracene	U	250
Carbazole	U	250
Di-n-butylphthalate	U	250
Fluoranthene	U	250
Pyrene	U	250
Butylbenzylphthalate	U	250
Benzo(a)anthracene	U	250
Chrysene	U	250
3,3'-Dichlorobenzidine	U	250
bis(2-Ethylhexyl)phthalate	U	250
Di-n-octylphthalate	U	250
Benzo(b)fluoranthene	U	250
Benzo(k)fluoranthene	U	250
Benzo(a)pyrene	U	250
Indeno(1,2,3-cd)pyrene	U	250
Dibenzo(a,h)anthracene	U	250
Benzo(g,h,i)perylene	U	250
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
2-Fluorophenol	* NA	70 - 130
Phenol-d5	* NA	70 - 130
Nitrobenzene-d5	* NA	70 - 130
2-Fluorobiphenyl	* NA	70 - 130
2,4,6-Tribromophenol	* NA	70 - 130
p-Terphenyl-d14	* NA	70 - 130

* A dilution of 1:10 or greater was required on this sample. Consequently, surrogate recoveries are not available.

Y. K. Smith
11/15/10

U = Undetected at reporting limits



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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TA2-02
BATCH ID: BNA1025010

TRACE ID: CK248-13
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/30/02
EXTRACTION DATE: 10/25/02
ANALYST: avl
D.L. MULTIPLIER: 20
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8270 MASS SPECTROMETRY SEMI-VOLATILE ORGANICS WASTE DILUTION TARGET COMPOUND LIST	RESULT mg/kg	REPORTING LIMIT mg/kg
bis(2-Chloroethyl)ether	U	500
2-Chlorophenol	U	500
Phenol	U	500
1,3-Dichlorobenzene	U	500
1,4-Dichlorobenzene	U	500
1,2-Dichlorobenzene	U	500
Benzyl alcohol	U	500
bis(2-Chloroisopropyl)ether	U	500
2-Methylphenol	U	500
3/4-Methylphenol	U	500
N-Nitroso-di-n-propylamine	U	500
Hexachloroethane	U	500
Nitrobenzene	U	500
Isophorone	U	500
2-Nitrophenol	U	500
2,4-Dimethylphenol	U	500
bis(2-Chloroethoxy)methane	U	500
Benzoic acid	U	1000
1,2,4-Trichlorobenzene	U	500
2,4-Dichlorophenol	U	500
Naphthalene	U	250
4-Chloroaniline	U	500
Hexachloro-1,3-butadiene	U	500
4-Chloro-3-methylphenol	U	500
2-Methylnaphthalene	U	250
Hexachlorocyclopentadiene	U	1000
2,4,6-Trichlorophenol	U	500
2,4,5-Trichlorophenol	U	500
2-Chloronaphthalene	U	500
2-Nitroaniline	U	500
Dimethylphthalate	U	500
Acenaphthylene	U	500
2,6-Dinitrotoluene	U	500
3-Nitroaniline	U	500
Acenaphthene	U	500
Dibenzofuran	U	500
2,4-Dinitrotoluene	U	500
4-Nitrophenol	U	4000
2,4-Dinitrophenol	U	4000
Diethylphthalate	U	500
Fluorene	U	500

U = Undetected at reporting limits

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CLIENT: Weston Solutions Inc.
TRACE ID: CK248-13

PAGE 2

EPA 8270 MASS SPECTROMETRY SEMI-VOLATILE ORGANICS TARGET COMPOUND LIST	RESULT mg/kg	REPORTING LIMIT mg/kg
4-Chlorophenyl-phenylether	U	500
4-Nitroaniline	U	500
4,6-Dinitro-2-methylphenol	U	1000
N-Nitrosodiphenylamine	U	50
4-Bromophenyl-phenylether	U	500
Hexachlorobenzene	U	500
Pentachlorophenol	U	1000
Phenanthrene	U	50
Anthracene	U	500
Carbazole	U	500
Di-n-butylphthalate	U	500
Fluoranthene	U	500
Pyrene	U	500
Butylbenzylphthalate	U	500
Benzo(a)anthracene	U	500
Chrysene	U	500
3,3'-Dichlorobenzidine	U	500
bis(2-Ethylhexyl)phthalate	U	500
Di-n-octylphthalate	U	500
Benzo(b)fluoranthene	U	500
Benzo(k)fluoranthene	U	500
Benzo(a)pyrene	U	500
Indeno(1,2,3-cd)pyrene	U	500
Dibenzo(a,h)anthracene	U	500
Benzo(g,h,i)perylene	U	500
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
2-Fluorophenol	* NA	70 - 130
Phenol-d5	* NA	70 - 130
Nitrobenzene-d5	* NA	70 - 130
2-Fluorobiphenyl	* NA	70 - 130
2,4,6-Tribromophenol	* NA	70 - 130
p-Terphenyl-d14	* NA	70 - 130

* A dilution of 1:10 or greater was required on this sample. Consequently, surrogate recoveries are not available.

J. H. Smith
11/19/02

U = Undetected at reporting limits



Ms. Linda Korobka
 Weston Solutions Inc.

CLIENT ID: Sybill
 SAMPLE ID: S1-CLA-01
 BATCH ID: BNA1025010

TRACE ID: CK248-14
 REPORT DATE: 11/04/02
 ANALYSIS DATE: 10/30/02
 EXTRACTION DATE: 10/25/02
 ANALYST: avl
 D.L. MULTIPLIER: 10
 SAMPLE DATE: 10/22/02
 SAMPLE RECEIVED: 10/23/02
 SAMPLE TYPE: Oil
 SAMPLER: sm

EPA 8270 MASS SPECTROMETRY SEMI-VOLATILE ORGANICS WASTE DILUTION TARGET COMPOUND LIST	RESULT mg/kg	REPORTING LIMIT mg/kg
bis(2-Chloroethyl)ether	U	250
2-Chlorophenol	U	250
Phenol	U	250
1,3-Dichlorobenzene	U	250
1,4-Dichlorobenzene	U	250
1,2-Dichlorobenzene	U	250
Benzyl alcohol	U	250
bis(2-Chloroisopropyl)ether	U	250
2-Methylphenol	U	250
3/4-Methylphenol	U	250
N-Nitroso-di-n-propylamine	U	250
Hexachloroethane	U	250
Nitrobenzene	U	250
Isophorone	U	250
2-Nitrophenol	U	250
2,4-Dimethylphenol	U	250
bis(2-Chloroethoxy)methane	U	250
Benzoic acid	U	500
1,2,4-Trichlorobenzene	U	250
2,4-Dichlorophenol	U	250
Naphthalene	U	250
4-Chloroaniline	U	250
Hexachloro-1,3-butadiene	U	250
4-Chloro-3-methylphenol	U	250
2-Methylnaphthalene	U	250
Hexachlorocyclopentadiene	U	500
2,4,6-Trichlorophenol	U	250
2,4,5-Trichlorophenol	U	250
2-Chloronaphthalene	U	250
2-Nitroaniline	U	250
Dimethylphthalate	U	250
Acenaphthylene	U	250
2,6-Dinitrotoluene	U	250
3-Nitroaniline	U	250
Acenaphthene	U	250
Dibenzofuran	U	250
2,4-Dinitrotoluene	U	250
4-Nitrophenol	U	2000
2,4-Dinitrophenol	U	2000
Diethylphthalate	U	250
Fluorene	U	250

U = Undetected at reporting limits

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CLIENT: Weston Solutions Inc.
TRACE ID: CK248-14

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EPA 8270 MASS SPECTROMETRY SEMI-VOLATILE ORGANICS TARGET COMPOUND LIST	RESULT mg/kg	REPORTING LIMIT mg/kg
4-Chlorophenyl-phenylether	U	250
4-Nitroaniline	U	250
4,6-Dinitro-2-methylphenol	U	500
N-Nitrosodiphenylamine	U	25
4-Bromophenyl-phenylether	U	250
Hexachlorobenzene	U	250
Pentachlorophenol	U	500
Phenanthrene	U	25
Anthracene	U	250
Carbazole	U	250
Di-n-butylphthalate	U	250
Fluoranthene	U	250
Pyrene	U	250
Butylbenzylphthalate	U	250
Benzo(a)anthracene	U	250
Chrysene	U	250
3,3'-Dichlorobenzidine	U	250
bis(2-Ethylhexyl)phthalate	U	250
Di-n-octylphthalate	U	250
Benzo(b)fluoranthene	U	250
Benzo(k)fluoranthene	U	250
Benzo(a)pyrene	U	250
Indeno(1,2,3-cd)pyrene	U	250
Dibenzo(a,h)anthracene	U	250
Benzo(g,h,i)perylene	U	250
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
2-Fluorophenol	* NA	70 - 130
Phenol-d5	* NA	70 - 130
Nitrobenzene-d5	* NA	70 - 130
2-Fluorobiphenyl	* NA	70 - 130
2,4,6-Tribromophenol	* NA	70 - 130
p-Terphenyl-d14	* NA	70 - 130

* A dilution of 1:10 or greater was required on this sample. Consequently, surrogate recoveries are not available.

J. Karab
11/19/02

U = Undetected at reporting limits



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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-ASH-01
BATCH ID: BNA1025010

TRACE ID: CK248-15
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/25/02
ANALYST: avl
D.L. MULTIPLIER: 20
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8270 MASS SPECTROMETRY SEMI-VOLATILE ORGANICS WASTE DILUTION TARGET COMPOUND LIST	RESULT mg/kg	REPORTING LIMIT mg/kg
bis(2-Chloroethyl)ether	U	500
2-Chlorophenol	U	500
Phenol	U	500
1,3-Dichlorobenzene	U	500
1,4-Dichlorobenzene	U	500
1,2-Dichlorobenzene	U	500
Benzyl alcohol	U	500
bis(2-Chloroisopropyl)ether	U	500
2-Methylphenol	U	500
3/4-Methylphenol	U	500
N-Nitroso-di-n-propylamine	U	500
Hexachloroethane	U	500
Nitrobenzene	U	500
Isophorone	U	500
2-Nitrophenol	U	500
2,4-Dimethylphenol	U	500
bis(2-Chloroethoxy)methane	U	500
Benzoic acid	U	1000
1,2,4-Trichlorobenzene	U	500
2,4-Dichlorophenol	U	500
Naphthalene	U	500
4-Chloroaniline	U	500
Hexachloro-1,3-butadiene	U	500
4-Chloro-3-methylphenol	U	500
2-Methylnaphthalene	U	500
Hexachlorocyclopentadiene	U	1000
2,4,6-Trichlorophenol	U	500
2,4,5-Trichlorophenol	U	500
2-Chloronaphthalene	U	500
2-Nitroaniline	U	500
Dimethylphthalate	U	500
Acenaphthylene	U	500
2,6-Dinitrotoluene	U	500
3-Nitroaniline	U	500
Acenaphthene	U	500
Dibenzofuran	U	500
2,4-Dinitrotoluene	U	500
4-Nitrophenol	U	4000
2,4-Dinitrophenol	U	4000
Diethylphthalate	U	500
Fluorene	U	500

U = Undetected at reporting limits

Z. Harold
11/19/02

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CLIENT: Weston Solutions Inc.
TRACE ID: CK248-15

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EPA 8270 MASS SPECTROMETRY
SEMI-VOLATILE ORGANICS
TARGET COMPOUND LIST

RESULT
mg/kg

REPORTING LIMIT
mg/kg

4-Chlorophenyl-phenylether	U	500
4-Nitroaniline	U	500
4,6-Dinitro-2-methylphenol	U	1000
N-Nitrosodiphenylamine	U	50
4-Bromophenyl-phenylether	U	500
Hexachlorobenzene	U	500
Pentachlorophenol	U	1000
Phenanthrene	U	50
Anthracene	U	500
Carbazole	U	500
Di-n-butylphthalate	U	500
Fluoranthene	U	500
Pyrene	U	500
Butylbenzylphthalate	U	500
Benzo(a)anthracene	U	500
Chrysene	U	500
3,3'-Dichlorobenzidine	U	500
bis(2-Ethylhexyl)phthalate	U	500
Di-n-octylphthalate	U	500
Benzo(b)fluoranthene	U	500
Benzo(k)fluoranthene	U	500
Benzo(a)pyrene	U	500
Indeno(1,2,3-cd)pyrene	U	500
Dibenzo(a,h)anthracene	U	500
Benzo(g,h,i)perylene	U	500

SURROGATE PERFORMANCE

RECOVERY %

CONTROL LIMIT %

2-Fluorophenol	* NA	70 - 130
Phenol-d5	* NA	70 - 130
Nitrobenzene-d5	* NA	70 - 130
2-Fluorobiphenyl	* NA	70 - 130
2,4,6-Tribromophenol	* NA	70 - 130
p-Terphenyl-d14	* NA	70 - 130

* A dilution of 1:10 or greater was required on this sample. Consequently, surrogate recoveries are not available.

g. Arnold
11/19/02

U = Undetected at reporting limits



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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-SCP-01
BATCH ID: BNA1025010

TRACE ID: CK248-16
REPORT DATE: 11/04/02
ANALYSIS DATE: 10/31/02
EXTRACTION DATE: 10/25/02
ANALYST: avl
D.L. MULTIPLIER: 20
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

EPA 8270 MASS SPECTROMETRY SEMI-VOLATILE ORGANICS WASTE DILUTION TARGET COMPOUND LIST	RESULT mg/kg	REPORTING LIMIT mg/kg
bis(2-Chloroethyl)ether	U	500
2-Chlorophenol	U	500
Phenol	U	500
1,3-Dichlorobenzene	U	500
1,4-Dichlorobenzene	U	500
1,2-Dichlorobenzene	U	500
Benzyl alcohol	U	500
bis(2-Chloroisopropyl)ether	U	500
2-Methylphenol	U	500
3/4-Methylphenol	U	500
N-Nitroso-di-n-propylamine	U	500
Hexachloroethane	U	500
Nitrobenzene	U	500
Isophorone	U	500
2-Nitrophenol	U	500
2,4-Dimethylphenol	U	500
bis(2-Chloroethoxy)methane	U	500
Benzoic acid	U	1000
1,2,4-Trichlorobenzene	U	500
2,4-Dichlorophenol	U	500
Naphthalene	U	500
4-Chloroaniline	U	500
Hexachloro-1,3-butadiene	U	500
4-Chloro-3-methylphenol	U	500
2-Methylnaphthalene	U	500
Hexachlorocyclopentadiene	U	1000
2,4,6-Trichlorophenol	U	500
2,4,5-Trichlorophenol	U	500
2-Chloronaphthalene	U	500
2-Nitroaniline	U	500
Dimethylphthalate	U	500
Acenaphthylene	U	500
2,6-Dinitrotoluene	U	500
3-Nitroaniline	U	500
Acenaphthene	U	500
Dibenzofuran	U	500
2,4-Dinitrotoluene	U	500
4-Nitrophenol	U	4000
2,4-Dinitrophenol	U	4000
Diethylphthalate	U	500
Fluorene	U	500

U = Undetected at reporting limits

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CLIENT: Weston Solutions Inc.
TRACE ID: CK248-16

PAGE 2

EPA 8270 MASS SPECTROMETRY SEMI-VOLATILE ORGANICS TARGET COMPOUND LIST	RESULT mg/kg	REPORTING LIMIT mg/kg
4-Chlorophenyl-phenylether	U	500
4-Nitroaniline	U	500
4,6-Dinitro-2-methylphenol	U	1000
N-Nitrosodiphenylamine	U	50
4-Bromophenyl-phenylether	U	500
Hexachlorobenzene	U	500
Pentachlorophenol	U	1000
Phenanthrene	U	50
Anthracene	U	500
Carbazole	U	500
Di-n-butylphthalate	U	500
Fluoranthene	U	500
Pyrene	U	500
Butylbenzylphthalate	U	500
Benzo(a)anthracene	U	500
Chrysene	U	500
3,3'-Dichlorobenzidine	U	500
bis(2-Ethylhexyl)phthalate	U	500
Di-n-octylphthalate	U	500
Benzo(b)fluoranthene	U	500
Benzo(k)fluoranthene	U	500
Benzo(a)pyrene	U	500
Indeno(1,2,3-cd)pyrene	U	500
Dibenzo(a,h)anthracene	U	500
Benzo(g,h,i)perylene	U	500
SURROGATE PERFORMANCE	RECOVERY %	CONTROL LIMIT %
2-Fluorophenol	* NA	70 - 130
Phenol-d5	* NA	70 - 130
Nitrobenzene-d5	* NA	70 - 130
2-Fluorobiphenyl	* NA	70 - 130
2,4,6-Tribromophenol	* NA	70 - 130
p-Terphenyl-d14	* NA	70 - 130

* A dilution of 1:10 or greater was required on this sample. Consequently, surrogate recoveries are not available.

Y. Korabel
11/19/02

U = Undetected at reporting limits

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-DRM-01

TRACE ID: CK248-01
REPORT DATE: 11/11/02
ANALYST: ms/eh
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Solid
SAMPLER: sm

TCLP METALS	BATCH ID	DIGESTION DATE	RESULT µg/L	REPORTING LIMIT µg/L	ANALYZED	METHOD NUMBER
Silver	MIC102801W	10/28/02	U	100	11/01/02	EPA 1311/6010
Arsenic	MIC102801W	10/28/02	U	300	10/29/02	EPA 1311/6010
Barium	MIC102801W	10/28/02	U	1000	10/29/02	EPA 1311/6010
Cadmium	MIC102801W	10/28/02	U	100	10/29/02	EPA 1311/6010
Chromium	MIC102801W	10/28/02	U	500	10/29/02	EPA 1311/6010
Lead	MIC102801W	10/28/02	U	500	10/29/02	EPA 1311/6010
Selenium	MIC102801W	10/28/02	U	600	10/29/02	EPA 1311/6010
Mercury	MER102802W	10/28/02	U	10	10/29/02	EPA 1311/7470

L Korobka
11/19/02

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fax 231.773.6537 Muskegon, MI 49444 2673
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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TOT-01

TRACE ID: CK248-02
REPORT DATE: 11/11/02
ANALYST: ms/eh
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

TCLP METALS	BATCH ID	DIGESTION DATE	RESULT µg/L	REPORTING LIMIT µg/L	ANALYZED	METHOD NUMBER
Silver	MIC102801W	10/28/02	U	100	11/01/02	EPA 1311/6010
Arsenic	MIC102801W	10/28/02	U	300	10/29/02	EPA 1311/6010
Barium	MIC102801W	10/28/02	U	1000	10/29/02	EPA 1311/6010
Cadmium	MIC102801W	10/28/02	U	100	10/29/02	EPA 1311/6010
Chromium	MIC102801W	10/28/02	U	500	10/29/02	EPA 1311/6010
Lead	MIC102801W	10/28/02	U	500	10/29/02	EPA 1311/6010
Selenium	MIC102801W	10/28/02	U	600	10/29/02	EPA 1311/6010
Mercury	MER102802W	10/28/02	U	10	10/29/02	EPA 1311/7470

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TOT-01DP

TRACE ID: CK248-03
REPORT DATE: 11/11/02
ANALYST: ms/eh
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

TCLP METALS	BATCH ID	DIGESTION DATE	RESULT µg/L	REPORTING LIMIT µg/L	ANALYZED	METHOD NUMBER
Silver	MIC102801W	10/28/02	U	100	11/01/02	EPA 1311/6010
Arsenic	MIC102801W	10/28/02	U	300	10/29/02	EPA 1311/6010
Barium	MIC102801W	10/28/02	U	1000	10/29/02	EPA 1311/6010
Cadmium	MIC102801W	10/28/02	U	100	10/29/02	EPA 1311/6010
Chromium	MIC102801W	10/28/02	U	500	10/29/02	EPA 1311/6010
Lead	MIC102801W	10/28/02	U	500	10/29/02	EPA 1311/6010
Selenium	MIC102801W	10/28/02	U	600	10/29/02	EPA 1311/6010
Mercury	MER102802W	10/28/02	U	10	10/29/02	EPA 1311/7470

L. Korobka
11/15/02

U = Undetected at reporting limits

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-x 231.773.6537

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-LAB-01

TRACE ID: CK248-04
REPORT DATE: 11/11/02
ANALYST: ms/sd
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

TCLP METALS	BATCH ID	DIGESTION DATE	RESULT µg/L	REPORTING LIMIT µg/L	ANALYZED	METHOD NUMBER
Silver	MIC103002S	10/30/02	U	500	11/07/02	EPA 1311/7761
Arsenic	MIC103002S	10/30/02	U	* 200	11/07/02	EPA 1311/7060
Barium	MIC103002S	10/30/02	U	1000	11/05/02	EPA 1311/6010
Cadmium	MIC103002S	10/30/02	U	50	11/07/02	EPA 1311/7131
Chromium	MIC103002S	10/30/02	U	* 880	11/05/02	EPA 1311/6010
Lead	MIC103002S	10/30/02	U	1000	11/07/02	EPA 1311/7421
Selenium	MIC103002S	10/30/02	U	* 400	11/07/02	EPA 1311/7740
Mercury	MIC103002S	10/30/02	U	** 200	11/08/02	EPA 1311/7471

* Because of the nature of the sample matrix, a smaller aliquot than usual was analyzed, resulting in a raised reporting limit.

* The reporting limit was raised due to dilution and also because of the nature of the sample matrix, a smaller aliquot than usual was analyzed, resulting in a raised reporting limit.

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-LAB-02

TRACE ID: CK248-05
REPORT DATE: 11/11/02
ANALYST: ms/eh
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

TCLP METALS	BATCH ID	DIGESTION DATE	RESULT µg/L	REPORTING LIMIT µg/L	ANALYZED	METHOD NUMBER
Silver	MIC102801W	10/28/02	U	100	11/01/02	EPA 1311/6010
Arsenic	MIC102801W	10/28/02	U	300	10/29/02	EPA 1311/6010
Barium	MIC102801W	10/28/02	U	1000	10/29/02	EPA 1311/6010
Cadmium	MIC102801W	10/28/02	U	100	10/29/02	EPA 1311/6010
Chromium	MIC102801W	10/28/02	U	500	10/29/02	EPA 1311/6010
Lead	MIC102801W	10/28/02	U	500	10/29/02	EPA 1311/6010
Selenium	MIC102801W	10/28/02	U	600	10/29/02	EPA 1311/6010
Mercury	MER102802W	10/28/02	U	10	10/29/02	EPA 1311/7470

L. Korobka
11/19/02

U = Undetected at reporting limits

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-LAB-05

TRACE ID: CK248-07
REPORT DATE: 11/11/02
ANALYST: ms/sd
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Liquid
SAMPLER: sm

TCLP METALS	BATCH ID	DIGESTION DATE	RESULT µg/L	REPORTING LIMIT µg/L	ANALYZED	METHOD NUMBER
Silver	MIC103002S	10/30/02	U	500	11/07/02	EPA 1311/7761
Arsenic	MIC103002S	10/30/02	U	* 200	11/07/02	EPA 1311/7060
Barium	MIC103002S	10/30/02	U	1000	11/05/02	EPA 1311/6010
Cadmium	MIC103002S	10/30/02	U	50	11/07/02	EPA 1311/7131
Chromium	MIC103002S	10/30/02	U	* 880	11/05/02	EPA 1311/6010
Lead	MIC103002S	10/30/02	U	1000	11/07/02	EPA 1311/7421
Selenium	MIC103002S	10/30/02	U	* 400	11/07/02	EPA 1311/7740
Mercury	MIC103002S	10/30/02	U	** 200	11/08/02	EPA 1311/7471

* Because of the nature of the sample matrix, a smaller aliquot than usual was analyzed, resulting in a raised reporting limit.

** The reporting limit was raised due to dilution and also because of the nature of the sample matrix, a smaller aliquot than usual was analyzed, resulting in a raised reporting limit.

L Korobka
11/19/02

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TOT-02

TRACE ID: CK248-10
REPORT DATE: 11/11/02
ANALYST: ms/sd
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

TOTAL METALS	BATCH ID	DIGESTION DATE	RESULT $\mu\text{g/kg}$	REPORTING LIMIT $\mu\text{g/kg}$	ANALYZED	METHOD NUMBER
Silver	MIC103002S	10/30/02	U	500	11/07/02	EPA 7761
Arsenic	MIC103002S	10/30/02	U	* 200	11/07/02	EPA 7060
Barium	MIC103002S	10/30/02	U	1000	11/05/02	EPA 6010
Cadmium	MIC103002S	10/30/02	U	50	11/07/02	EPA 7131
Chromium	MIC103002S	10/30/02	U	* 880	11/05/02	EPA 6010
Lead	MIC103002S	10/30/02	U	1000	11/07/02	EPA 7421
Selenium	MIC103002S	10/30/02	U	* 400	11/07/02	EPA 7740
Mercury	MIC103002S	10/30/02	U	** 200	11/08/02	EPA 7471

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L. Korobka
11/19/02

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TOT-02DP

TRACE ID: CK248-11
REPORT DATE: 11/11/02
ANALYST: ms/sd
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

TOTAL METALS	BATCH ID	DIGESTION DATE	RESULT $\mu\text{g/kg}$	REPORTING LIMIT $\mu\text{g/kg}$	ANALYZED	METHOD NUMBER
Silver	MIC103002S	10/30/02	U	500	11/07/02	EPA 7761
Arsenic	MIC103002S	10/30/02	U	* 200	11/07/02	EPA 7060
Barium	MIC103002S	10/30/02	U	1000	11/05/02	EPA 6010
Cadmium	MIC103002S	10/30/02	U	50	11/07/02	EPA 7131
Chromium	MIC103002S	10/30/02	U	* 870	11/05/02	EPA 6010
Lead	MIC103002S	10/30/02	U	1000	11/07/02	EPA 7421
Selenium	MIC103002S	10/30/02	U	* 400	11/07/02	EPA 7740
Mercury	MIC103002S	10/30/02	U	** 200	11/08/02	EPA 7471

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L Korobka
11/19/02

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TA2-01

TRACE ID: CK248-12
REPORT DATE: 11/11/02
ANALYST: ms/sd
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

TOTAL METALS	BATCH ID	DIGESTION DATE	RESULT $\mu\text{g/kg}$	REPORTING LIMIT $\mu\text{g/kg}$	ANALYZED	METHOD NUMBER
Silver	MIC103002S	10/30/02	U	500	11/07/02	EPA 7761
Arsenic	MIC103002S	10/30/02	15000	* 1400	11/05/02	EPA 6010
Barium	MIC103002S	10/30/02	36000	1000	11/05/02	EPA 6010
Cadmium	MIC103002S	10/30/02	170	50	11/07/02	EPA 7131
Chromium	MIC103002S	10/30/02	7300	* 860	11/05/02	EPA 6010
Lead	MIC103002S	10/30/02	12000	* 1300	11/05/02	EPA 6010
Selenium	MIC103002S	10/30/02	U	* 400	11/07/02	EPA 7740
Mercury	MIC103002S	10/30/02	U	** 200	11/08/02	EPA 7471

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-TA2-02

TRACE ID: CK248-13
REPORT DATE: 11/11/02
ANALYST: ms/sd
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

TOTAL METALS	BATCH ID	DIGESTION DATE	RESULT $\mu\text{g/kg}$	REPORTING LIMIT $\mu\text{g/kg}$	ANALYZED	METHOD NUMBER
Silver	MIC103002S	10/30/02	850	500	11/07/02	EPA 7761
Arsenic	MIC103002S	10/30/02	26000	* 1400	11/05/02	EPA 6010
Barium	MIC103002S	10/30/02	140000	1000	11/05/02	EPA 6010
Cadmium	MIC103002S	10/30/02	290	50	11/07/02	EPA 7131
Chromium	MIC103002S	10/30/02	35000	* 880	11/05/02	EPA 6010
Lead	MIC103002S	10/30/02	35000	* 1400	11/05/02	EPA 6010
Selenium	MIC103002S	10/30/02	U	* 400	11/07/02	EPA 7740
Mercury	MIC103002S	10/30/02	U	** 200	11/08/02	EPA 7471

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L Korobka
11/11/02

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-CLA-01

TRACE ID: CK248-14
REPORT DATE: 11/11/02
ANALYST: ms/sd
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

TOTAL METALS	BATCH ID	DIGESTION DATE	RESULT $\mu\text{g/kg}$	REPORTING LIMIT $\mu\text{g/kg}$	ANALYZED	METHOD NUMBER
Silver	MIC103002S	10/30/02	U	500	11/07/02	EPA 7761
Arsenic	MIC103002S	10/30/02	230	* 200	11/07/02	EPA 7060
Barium	MIC103002S	10/30/02	2900	1000	11/05/02	EPA 6010
Cadmium	MIC103002S	10/30/02	U	50	11/07/02	EPA 7131
Chromium	MIC103002S	10/30/02	3000	* 870	11/05/02	EPA 6010
Lead	MIC103002S	10/30/02	5900	* 1300	11/05/02	EPA 6010
Selenium	MIC103002S	10/30/02	U	* 400	11/07/02	EPA 7740
Mercury	MIC103002S	10/30/02	U	** 200	11/08/02	EPA 7471

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-ASH-01

TRACE ID: CK248-15
REPORT DATE: 11/11/02
ANALYST: ms/sd
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

TOTAL METALS	BATCH ID	DIGESTION DATE	RESULT $\mu\text{g/kg}$	REPORTING LIMIT $\mu\text{g/kg}$	ANALYZED	METHOD NUMBER
Silver	MIC103002S	10/30/02	U	500	11/07/02	EPA 7761
Arsenic	MIC103002S	10/30/02	1200	* 200	11/07/02	EPA 7060
Barium	MIC103002S	10/30/02	13000	1000	11/05/02	EPA 6010
Cadmium	MIC103002S	10/30/02	210	50	11/07/02	EPA 7131
Chromium	MIC103002S	10/30/02	6300	* 880	11/05/02	EPA 6010
Lead	MIC103002S	10/30/02	14000	* 1400	11/05/02	EPA 6010
Selenium	MIC103002S	10/30/02	U	* 400	11/07/02	EPA 7740
Mercury	MIC103002S	10/30/02	U	** 200	11/08/02	EPA 7471

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J. Korobka
11/19/02

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
SAMPLE ID: S1-SCP-01

TRACE ID: CK248-16
REPORT DATE: 11/11/02
ANALYST: ms/sd
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Oil
SAMPLER: sm

TOTAL METALS	BATCH ID	DIGESTION DATE	RESULT $\mu\text{g/kg}$	REPORTING LIMIT $\mu\text{g/kg}$	ANALYZED	METHOD NUMBER
Silver	MIC103002S	10/30/02	U	500	11/07/02	EPA 7761
Arsenic	MIC103002S	10/30/02	1200	* 200	11/07/02	EPA 7060
Barium	MIC103002S	10/30/02	150000	1000	11/05/02	EPA 6010
Cadmium	MIC103002S	10/30/02	1200	50	11/07/02	EPA 7131
Chromium	MIC103002S	10/30/02	35000	* 870	11/05/02	EPA 6010
Lead	MIC103002S	10/30/02	81000	* 1400	11/05/02	EPA 6010
Selenium	MIC103002S	10/30/02	U	* 400	11/07/02	EPA 7740
Mercury	MIC103002S	10/30/02	200	** 200	11/08/02	EPA 7471

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Y. Korobka
11/19/02

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
BATCH ID: RCYD102501S

TRACE ID: CK248
REPORT DATE: 11/05/02
ANALYSIS DATE: 10/28/02
PREP DATE: 10/25/02
ANALYST: amc
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Solid/Liquid
SAMPLER: sm

TRACE SAMPLE NO.	SAMPLE ID	REACTIVE CYANIDE mg/kg	REPORTING LIMIT mg/kg	METHOD NUMBER
SB102501	Method Blank	U	0.50	SW-846 Chpt 7/EPA 9012
01	S1-DRM-01	U	0.50	SW-846 Chpt 7/EPA 9012
02	S1-TOT-01	U	0.50	SW-846 Chpt 7/EPA 9012
03	S1-TOT-01DP	U	0.50	SW-846 Chpt 7/EPA 9012
04	S1-LAB-01	U	0.50	SW-846 Chpt 7/EPA 9012
05	S1-LAB-02	U	0.50	SW-846 Chpt 7/EPA 9012
07	S1-LAB-05	U	0.50	SW-846 Chpt 7/EPA 9012

L Korobka
11/19/02

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill
BATCH ID: RCFD102501S

TRACE ID: CK248
REPORT DATE: 11/05/02
ANALYSIS DATE: 10/29/02
PREP DATE: 10/25/02
ANALYST: lc
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Solid/Liquid
SAMPLER: sm

TRACE SAMPLE NO.	SAMPLE ID	REACTIVE SULFIDE mg/kg	REPORTING LIMIT mg/kg	METHOD NUMBER
SB102501	Method Blank	U	5.0	SW-846 Chpt 7/EPA 376.2
01	S1-DRM-01	U	5.0	SW-846 Chpt 7/EPA 376.2
02	S1-TOT-01	U	5.0	SW-846 Chpt 7/EPA 376.2
03	S1-TOT-01DP	U	5.0	SW-846 Chpt 7/EPA 376.2
04	S1-LAB-01	U	5.0	SW-846 Chpt 7/EPA 376.2
05	S1-LAB-02	U	5.0	SW-846 Chpt 7/EPA 376.2
07	S1-LAB-05	U	5.0	SW-846 Chpt 7/EPA 376.2

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Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill

TRACE ID: CK248
REPORT DATE: 11/05/02
METHOD: EPA 1010
ANALYST: cr
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Solid/Liquid
SAMPLER: sm

TRACE SAMPLE NO.	BATCH ID	SAMPLE ID	FLASH POINT	REPORTING LIMIT	ANALYZED
01	FP102801W	S1-DRM-01	>200° F	NA	10/28/02
02	FP102801W	S1-TOT-01	>200° F	NA	10/28/02
03	FP103101W	S1-TOT-01DP	140° F	NA	10/31/02
03 DUP	FP111301W	S1-TOT-01DP	>200° F	NA	11/13/02
04	FP103001W	S1-LAB-01	100° F	NA	10/30/02
05	FP110101W	S1-LAB-02	95° F	NA	11/01/02
07	FP103001W	S1-LAB-05	75° F	NA	10/30/02
10	FP103001W	S1-TOT-02	>200° F	NA	10/30/02
11	FP103101W	S1-TOT-02DP	>200° F	NA	10/31/02
12	FP103101W	S1-TA2-01	>200° F	NA	10/31/02
13	FP110101W	S1-TA2-02	>200° F	NA	11/01/02
14	FP110101W	S1-CLA-01	>200° F	NA	11/01/02
15	FP110101W	S1-ASH-01	70° F	NA	11/01/02
16	FP110101W	S1-SCP-01	170° F	NA	11/01/02

L Korobka
11/15/02

U = Undetected at reporting limits



Ms. Linda Korobka
Weston Solutions Inc.

CLIENT ID: Sybill

TRACE ID: CK248
REPORT DATE: 11/05/02
ANALYST: km
SAMPLE DATE: 10/22/02
SAMPLE RECEIVED: 10/23/02
SAMPLE TYPE: Solid/Liquid
SAMPLER: sm

TRACE SAMPLE NO.	BATCH ID	SAMPLE ID	pH	REPORTING LIMIT	METHOD NUMBER	ANALYZED
01	PH102501S	S1-DRM-01	4.80	NA	EPA 9045	10/25/02
02	PH102501W	S1-TOT-01	6.54	NA	EPA 150.1	10/25/02
03	PH102501W	S1-TOT-01DP	7.38	NA	EPA 150.1	10/25/02
04	PH102501S	S1-LAB-01	3.88	NA	EPA 9045	10/25/02
05	PH102501S	S1-LAB-02	4.05	NA	EPA 9045	10/21/02
06	PH102501W	S1-LAB-04	0	NA	EPA 150.1	10/25/02
07	PH102501S	S1-LAB-05	4.01	NA	EPA 9045	10/25/02
08	PH102501S	S1-TAC-01	12.97	NA	EPA 9045	10/25/02
10	PH102901S	S1-TOT-02	6.69	NA	EPA 9045	10/29/02
11	PH102901S	S1-TOT-02DP	6.90	NA	EPA 9045	10/29/02
12	PH102901S	S1-TA2-01	4.59	NA	EPA 9045	10/29/02
13	PH102901S	S1-TA2-02	6.41	NA	EPA 9045	10/29/02
14	PH102901S	S1-CLA-01	4.38	NA	EPA 9045	10/29/02
15	PH102901S	S1-ASH-01	6.08	NA	EPA 9045	10/29/02
16	PH102901S	S1-SCP-01	7.96	NA	EPA 9045	10/29/02

L Korobka
11/15/02



CT&E Environmental Services Inc.

November 6, 2002

Linda Korobka
Weston Solutions, Inc. of Michigan
2501 Jolly Road
Suite 100
Okemos, Michigan 48864

1200 Conrad Industrial Drive
Ludington, MI 49431-2681
Tel: (231) 843-1877
Fax: (231) 845-9942

RE: Sybill, Inc. Site – Total Halogens
(CT&E Lab ID 3025027)

Dear Ms. Korobka:

Enclosed are the results for the Total Halogen analyses for samples collected by Weston Solutions, Inc. of Michigan in support of the U.S. EPA START V Contract at the Sybill, Inc. Site in Detroit, Michigan.

The samples were picked up on October 24, 2002 and received on October 25, 2002 at CT&E Environmental Services (CT&E-MI) in Ludington, Michigan. Upon receipt at CT&E-MI, the samples were logged as CT&E-MI Workorder No. 3025027.

Following receipt at CT&E-MI, the samples were subcontracted to Commercial Testing & Engineering Co. in South Holland, Illinois (CT&E-IL) and results reported in Analysis Report No. 71-192507 through 71-192513.

A copy of the subcontractor laboratory report and supporting laboratory and quality control documentation is enclosed for your review.

Thank you for using CT&E Environmental Services. Please call me at (231) 843-1877 if you have any questions.

Sincerely,

Lidya Gulizia
Project Manager

Enclosure: CT&E-IL Analysis Report No. 71-192507 through 71-192513
CT&E-MI Chain-of-Custody Records (Lab ID 3025027)

projman\weston\3025027_THH
LG 11/06/02



COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 630-953-9300 FAX: 630-953-9306

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Member of the SGS Group (Société Générale de Surveillance)

November 1, 2002

ADDRESS ALL CORRESPONDENCE TO:
16130 VAN DRUNEN ROAD
SOUTH HOLLAND, IL 60471
TEL: (708) 331-2900
FAX: (708) 333-3060
www.comteco.com

CT&E ENVIRONMENTAL SERVICES
Anatech Division
1200 Conrad Industrial Dr.
Ludington, MI 49431
Attn: Lidya Gulizia

Sample identification by
CT&E Environmental Services

Kind of sample
reported to us Liquid

Sample taken at 3025027-001

Project Name: Sybill
Sample ID: S1-TOT-02

Sample taken by -----

Date sampled October 22, 2002

Date received October 29, 2002

P.O. No. 109751

Analysis Report No. 71-192507

Page 1 of 1

As Received

TOTAL HALOGENS, ug/g

80 *5*

METHOD

Total Halogens: SW 846 Module Method 9253

L. Kade
11/14/02

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

South Holland Laboratory



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CT 3 E 451843-1077 LUCIN STN, A11

CHAIN-OF-CUSTODY RECORD AND WORK AUTHORIZATION

TRACE ID NO.

Page 1 of 1

Report Results To:

Client Name: WESTON SOLUTIONS, INC.
Contact Person: LINDA KOROBKA
Mailing Address: 2501 JOLLY RD. SUITE 100
City, State, Zip Code: OKEMOS, MI 48864
Phone: 517-381-5920 Fax: 517-381-5921
Email Address:
Project Name: SYBIL PO #: Trace Quote #:
Project #:

Regulatory Requirements: Turnaround Requirements: Matrix Key: S = Soil W = Wipes
RCRA Standard (2 wk) 10/24/02 X W = Water L = Liquid Waste
NPDES 5 Day 2-4 Day (RUSH) SE = Sediment A = Air
USACE 24 Hour (RUSH) OI = Oil D = Drinking Water
Special Requires prior approval SO = Solid Waste

Sample Identification / Request for Analytical Services

SAMPLE NO.	DATE TAKEN	TIME TAKEN	METALS FIELD FILTERED	CLIENT SAMPLE ID	MATRIX	NUMBER OF CONTAINERS
1	10/24/02	1245		SI-TOT-02	01	1
2	10/24/02	1245		SI-TOT-02 DP	01	1
3	10/24/02	1535		SI-TA2-01	01	1
4	10/24/02	1535		SI-TA2-02	01	1
5	10/24/02	1535		SI-TA2-02-sm	01	1
6	10/24/02	1535		SI-TA2-01 (MS/MSD)	01	1
7	10/24/02	1535		SI-TA2-01	01	1
8	10/24/02	1535		SI-TA2-01	01	1

Item #	RELEASED BY	RECEIVED BY	DATE	TIME	Item #	RELEASED BY	RECEIVED BY	DATE	TIME
1	<u>[Signature]</u>	<u>[Signature]</u>	10/23/02	1245	3	<u>[Signature]</u>	<u>[Signature]</u>		
2	<u>[Signature]</u>	<u>[Signature]</u>	10-24-02	1215	4	<u>[Signature]</u>	<u>[Signature]</u>	10-24-02	850PM

TOTAL HALOGENS

REMARKS

Possible Health Hazard

ANALYSIS REQUESTED

Logged By: _____ Checked By: _____
Received on ice: Yes No Cooler Temp (°C)
Preservative Checked: Yes No
Volatiles Preserved: HCl MeOH En One No
OCT 29 2002

RECEIVED

Please Sign

Item # 1 RELEASED BY [Signature] RECEIVED BY [Signature] DATE 10/23/02 TIME 1245
Item # 2 RELEASED BY [Signature] RECEIVED BY [Signature] DATE 10-24-02 TIME 1215

Workorder

Chain of Custody



CT&E Environmental Services Inc.

Michigan Division, 1200 Conrad Industrial Dr., Ludington MI 49431-2681
Phone: 231-843-1877 Fax 231-845-9942

E CT&E-MI 3025027

PO# 109757

Results To <u>CT&E ENV. SERVICES</u>		Project Name <u>Sybill</u>		Test Methods		Bottle Comments													
Attention: <u>Ludington MI 49431</u> <u>Lidya Gulizia</u>		Project Number: _____		Total Halogens (By Bomb Calorimetry)		Run GC (CMS/MSD/DUP) on SI-CLA-01 Hazardous Material Classification Need to provide Log BOD Documentation & GC Results Return Signed GC with Results													
Telephone # <u>231-843-1877</u>		State in which samples were collected: _____																	
FAX ? <input checked="" type="radio"/> Yes <input type="radio"/> No Fax # <u>231-845-9942</u>		REQUIRED COMPLETION DATE: <u>Nov. 1, 2002</u>																	
Invoice To: <u>Same</u>		Sampled by: <u>SM</u>																	
Telephone # _____		Work Authorization Signature: _____				Preservative													
		This signature authorizes CT&E to perform the work requested on this form and acknowledges the terms and conditions of payment which are listed on the reverse side of this form.				pH													
Sample No	Client Sample ID	Sampling Location	Date	Time am / pm	Comp Grab C/G	Sample Matrix	Drinking Water Y/N	Fed Filtered Y/N	No. of Bottles	40 ml Vial	1L Amber	250ml PI	500ml PI	1L PI	2oz gl	4oz gl	8oz g	Other	
001	SI-TOT-02	3025027-001	10-22-02	1245		Liq													
	SI-TOT-02DP	002		1245															
	SI-TAZ-01	003		1515															
	SI-TAZ-02	004		1535															
	SI-CLA-01	005		1610															
	SI-ASH-01	006		1645															
	SI-SCP-01	007		1430															
Relinquished by		Date / Time (am / pm)		Relinquished by		Date / Time (am / pm)		Relinquished by		Date / Time (am / pm)		Relinquished by		Date / Time (am / pm)		Relinquished by		Date / Time (am / pm)	
Received by <u>P. Appleton</u>		Date / Time (am / pm) <u>10-25-02 900</u>		Received by <u>[Signature]</u>		Date / Time (am / pm) <u>10-24-02 1700</u>		Received by <u>P. Appleton</u>		Date / Time (am / pm) <u>10-25-02 10:00</u>		Received by <u>[Signature]</u>		Date / Time (am / pm) <u>10-25-02 855 AM</u>		Received by <u>[Signature]</u>		Date / Time (am / pm)	
Project Comments:																			

Rush Project

24 hrs 48 hrs 3 days 5 days

(based upon laboratory receipt date & time)

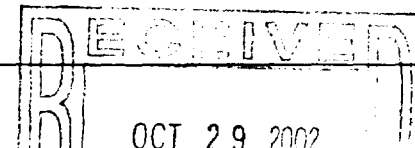
Detection Limits:

MI 641 MI 201 Other (specify)

Cooler Temperature:

42°F

Quote Number:





COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 630-953-9300 FAX: 630-953-9306

SINCE 1908*



Member of the SGS Group (Société Générale de Surveillance)

November 1, 2002

ADDRESS ALL CORRESPONDENCE TO
16130 VAN DRUNEN ROAD
SOUTH HOLLAND, IL 60473
TEL: (708) 331-2900
FAX: (708) 333-3060
www.comteco.com

CT&E ENVIRONMENTAL SERVICES
Anatech Division
1200 Conrad Industrial Dr.
Ludington, MI 49431
Attn: Lidya Gulizia

Sample identification by
CT&E Environmental Services

Kind of sample
reported to us Liquid

Sample taken at 3025027-002

Project Name: Sybill
Sample ID: S1-TOT-02DP

Sample taken by -----

Date sampled October 22, 2002

Date received October 29, 2002

P.O. No. 109751

Analysis Report No. 71-192508

Page 1 of 1

As Received

TOTAL HALOGENS, ug/g 277 J

METHOD

Total Halogens: SW 846 Module Method 9253

L. Kade
11/14/02

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

[Signature]
South Holland Laboratory





COMMERCIAL TESTING & ENGINEERING CO.

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www.comteco.com

CT&E ENVIRONMENTAL SERVICES
Anatech Division
1200 Conrad Industrial Dr.
Ludington, MI 49431
Attn: Lidya Gulizia

Sample identification by
CT&E Environmental Services

Kind of sample
reported to us Liquid

Sample taken at 3025027-003

Project Name: Sybill
Sample ID: S1-TAZ-01

Sample taken by -----

Date sampled October 22, 2002

Date received October 29, 2002

P.O. No. 109751

Analysis Report No. 71-192509

Page 1 of 1

As Received

TOTAL HALOGENS, ug/g 1278

METHOD

Total Halogens: SW 846 Module Method 9253

L. Knoll
11/14/02

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

South Holland Laboratory





COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 630-953-9300 FAX: 630-953-9306

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November 1, 2002

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FAX: (708) 333-3060
www.comteco.com

CT&E ENVIRONMENTAL SERVICES
Anatech Division
1200 Conrad Industrial Dr.
Ludington, MI 49431
Attn: Lidya Gulizia

Sample identification by
CT&E Environmental Services

Kind of sample
reported to us Liquid

Sample taken at 3025027-004

Sample taken by -----

Date sampled October 22, 2002

Date received October 29, 2002

Project Name: Sybill
Sample ID: S1-TAZ-02

P.O. No. 109751

Analysis Report No. 71-192510

Page 1 of 1

As Received

TOTAL HALOGENS, ug/g 461

METHOD

Total Halogens: SW 846 Module Method 9253

g. K. K. K.
11/14/02

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

[Signature]
South Holland Laboratory





COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 630-953-9300 FAX: 630-953-9306

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November 1, 2002

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SOUTH HOLLAND, IL 6047
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FAX: (708) 333-3060
www.comteco.com

CT&E ENVIRONMENTAL SERVICES
Anatech Division
1200 Conrad Industrial Dr.
Ludington, MI 49431
Attn: Lidya Gulizia

Sample identification by
CT&E Environmental Services

Kind of sample
reported to us Liquid

Project Name: Sybill
Sample ID: S1-CLA-01

Sample taken at 3025027-005

Sample taken by -----

Date sampled October 22, 2002

Date received October 29, 2002

P.O. No. 109751

Analysis Report No. 71-192511

Page 1 of 1

As Received

TOTAL HALOGENS, ug/g 4043

METHOD

Total Halogens: SW 846 Module Method 9253

Y. Kroll
11/14/02

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

South Holland Laboratory





COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 630-953-9300 FAX: 630-953-9306

SINCE 1908*



Member of the SGS Group (Société Générale de Surveillance)

November 1, 2002

ADDRESS ALL CORRESPONDENCE TO:
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SOUTH HOLLAND, IL 60473
TEL: (708) 331-2900
FAX: (708) 333-3060
www.comteco.com

CT&E ENVIRONMENTAL SERVICES
Anatech Division
1200 Conrad Industrial Dr.
Ludington, MI 49431
Attn: Lidya Gulizia

Sample identification by
CT&E Environmental Services

Kind of sample
reported to us Liquid

Sample taken at 3025027-006

Project Name: Sybill
Sample ID: S1-ASH-01

Sample taken by -----

Date sampled October 22, 2002

Date received October 29, 2002

P.O. No. 109751

Analysis Report No. 71-192512

Page 1 of 1

As Received

TOTAL HALOGENS, ug/g 1804

METHOD

Total Halogens: SW 846 Module Method 9253

Handwritten signature
11/14/02

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Handwritten signature
South Holland Laboratory





COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 630-953-9300 FAX: 630-953-9306

SINCE 1908*



SGS

Member of the SGS Group (Société Générale de Surveillance)

November 1, 2002

ADDRESS ALL CORRESPONDENCE TO:
16130 VAN DRUNEN ROAD
SOUTH HOLLAND, IL 60470
TEL: (708) 331-2900
FAX: (708) 333-3060
www.comteco.com

CT&E ENVIRONMENTAL SERVICES
Anatech Division
1200 Conrad Industrial Dr.
Ludington, MI 49431
Attn: Lidya Gulizia

Sample identification by
CT&E Environmental Services

Kind of sample
reported to us Liquid

Sample taken at 3025027-007

Project Name: Sybill
Sample ID: S1-SCP-01

Sample taken by -----

Date sampled October 22, 2002

Date received October 29, 2002

P.O. No. 109751

Analysis Report No. 71-192513

Page 1 of 1

As Received

TOTAL HALOGENS, ug/g 728

METHOD

Total Halogens: SW 846 Module Method 9253

L. Gulizia
11/14/02

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

South Holland Laboratory

MEMBER
ACIL

METHOD: SW 846 Method 9253

By: M. Vahsen

QC DATA: Std: AR 2006

Expected

Actual

500 ug/g

515 49/9

$$\text{Net AgNO}_3 = \text{Total} - \text{Blank}$$
461

F = 0.2 (If N AgNO₃ Is 0.056), 0.1 (If N AgNO₃ Is 0.028)

APPENDIX F

Sample Chains of Custody



phone 231.773.5998
toll-free 800.733.5998
fax 231.773.6537
2241 Black Creek Road
Muskegon, MI 49444-2673
www.trace-labs.com

CHAIN-OF-CUSTODY RECORD
AND WORK AUTHORIZATION

TRACE ID NO. CL24P
Page 1 of 1

Report Results To:

Client Name: WESTERN SOLVENTS, INC.
Contact Person: LINDA KACBERA
Mailing Address: 2501 JOLLY RD. SUITE 100
City, State, Zip Code: ORLANDO, FL 32804
Phone: 317-381-5920 Fax: 317-381-5921
Email Address: _____
Project Name: SYBIL PO #: _____ Trace Quote #: _____

Project #: _____ Sampled by: J. MEYER

Regulatory Requirements
MEPA TMDL's _____
RCRA _____
NPDES _____
USACE _____
Special _____
Turnaround Requirements
Standard (2 wk) ☒
5 Day _____
2-4 Day (RUSH) _____
24 Hour (RUSH) _____
Requires prior approval _____
Matrix Key
S = Soil
W = Water
SE = Sediment
OI = Oil
SO = Solid Waste
WI = Wipes
L = Liquid Waste
A = Air
D = Drinking Water

SAMPLE NO.	DATE TAKEN	TIME TAKEN	METALS FIELD FILTERED	CLIENT SAMPLE ID	MATRIX	NUMBER OF CONTAINERS
1	1/15/02			SI-BK11-C1	SO	3
2	1/15/02			SI-16T-C1	LS	5
3	1/15/02			SI-10T-C1	LS	5
4	1/15/02			SI-10T-C1	LS	4
5	1/15/02			SI-10T-C2	LS	8
6	1/15/02			SI-10T-C4	LS	1
7	1/15/02			SI-10T-C5	LS	5
8	1/15/02			SI-10T-C1	LS	1
9	1/15/02			SI-10T-C1	LS	2

Logged By: OMK Checked By: _____
Received on ice: Yes No Cooler Temp (°C) _____
Preservative Checked: Yes No
Volatiles Preserved: HCl MeOH En Core No Low Level
ANALYSIS REQUESTED

Item #	RELEASED BY	RECEIVED BY	DATE	TIME	REMARKS
1)	<u>[Signature]</u>	<u>[Signature]</u>	<u>1/15/02</u>		
2)	<u>[Signature]</u>	<u>[Signature]</u>	<u>1/15/02</u>		
3)					
4)					

Please Sign

Item #	RELEASED BY	RECEIVED BY	DATE	TIME
1)	<u>[Signature]</u>	<u>[Signature]</u>	<u>1/15/02</u>	
2)	<u>[Signature]</u>	<u>[Signature]</u>	<u>1/15/02</u>	
3)				
4)				

TRACE

Assurance
Accuracy
Accountability

phone 231-773-5998
toll-free 800-733-5998
fax 231-773-6537

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673
www.trace-labs.com

CHAIN-OF-CUSTODY RECORD AND WORK AUTHORIZATION

TRACE ID NO.

Page 1 of 1

Client Name: WESTON SOLUTIONS, INC.

Contact Person: LINDA KOROBKA

Mailing Address: 2501 JOLLY RD. SUITE 100

City, State, Zip Code: OKEMOS, MI 48864

Phone: 517-381-5920 Fax: 517-381-5921

Email Address:

Project Name: SYBILL

PO #:

Trace
Quote #:

Project #:

Sampled by: SARAH MEYER

ANALYSIS REQUESTED

Regulatory Requirements

MERA TMDLs ☐

RCRA ☐

NPDES ☐

USACE ☐

Special ☒

Turnaround Requirements

Standard (2 wk) ☒

5 Day ☐

2-4 Day (RUSH) ☐

24 Hour (RUSH) ☐

* Requires prior approval

Matrix Key

S = Soil

W = Water

SE = Sediment

OI = Oil

SO = Solid Waste

WI = Wipes

L = Liquid Waste

A = Air

D = Drinking Water

RECEIVED
OCT 29 2002

SAMPLE NO.	DATE TAKEN	TIME TAKEN	METALS FIELD FILTERED	CLIENT SAMPLE ID	MATRIX	NUMBER OF CONTAINERS	REMARKS	Possible Health Hazard
1	10/22/02	1245		SI-TOT-02	OI	1	X	
2	10/22/02	1245		SI-TOT-02 DP	OI	1	X	
3	10/22/02	1515		SI-TA2-01	OI	1	X	
4	10/22/02	1535		SI-TA2-02	OI	1	X	
5	10/22/02	1610		SI-TA2-02 SM	OI	1		
6	10/22/02	1645		SI-CLA-01 (MS/MSD)	OI	1	X	
7	10/22/02	1645		SI-ASH-01	OI	1	X	
8	10/22/02	1430		SI-SCP-01	OI	1	X	
* MUST ACHIEVE REPORTABLE VALUES TO DOCUMENT MATERIAL AS HAZARDOUS MATERIAL PER FEDERAL REGULATIONS *								

Item #	RELEASED BY	RECEIVED BY	DATE	TIME	Item #	RELEASED BY	RECEIVED BY	DATE	TIME
1	<i>[Signature]</i>	<i>[Signature]</i>	10/22/02	1245	3	<i>[Signature]</i>	<i>[Signature]</i>		
2	<i>[Signature]</i>	<i>[Signature]</i>	10/22/02	1245	4	<i>[Signature]</i>	<i>[Signature]</i>		

NU-00-2002-00-000

1.1

Workorder



Chain of Custody

CT&E Environmental Services Inc.

Michigan Division, 1200 Conrad Industrial Dr., Ludington, MI 49431-2681

Phone: 231-843-1877 Fax: 231-845-8942

E CT&E-MI 3225027

PO# 109751

Results To: CT&E Env. Services

Project Name:

Sybill

Test Methods

Bottle Comments

Run GC CMS/MSD/DUP)
ON SI-CLA-01
Hazardous Material Classification
Need to provide Log BOD
Documentation + GC Results
Return Signed GC with Results

Attention:

Ludington MI 49431

Lidia Gulizia

Project Number:

State in which samples were collected:

REQUIRED COMPLETION DATE: Nov 1, 2002

Sampled by:

SM

Work Authorization Signature:

This signature authorizes CT&E to perform the work requested on this form and acknowledges the terms and conditions of payment which are listed on the reverse side of this form

Total 140gms
(By Bomb Calorimetry)

FAX? Yes No

Fax #

231-845-9942

Invoice To:

Same

Telephone #

Sample No.	Client Sample ID	Sampling Location	Date	Time am / pm	Comp Grab C/G	Sample Matrix	Drinking Water Y/N	Field Filtered Y/N	Total 140gms (By Bomb Calorimetry)	No. of Bacteria	40 ml / ml	1L Amber	250ml	500ml	1L	2oz	6oz	8oz	Other
01	SI-TOT-02	3225027-001	10-21-02	1245		Liq													
	SI-TOT-02DP	002		1245															
	SI-TAZ-01	003		1535															
	SI-TAZ-02	004		1535															
	SI-CLA-01	005		1610															
	SI-ASH-01	006		1645															
	SI-SCP-01	007		1430															

Analyzed by

Date / Time (am / pm)

Relinquished by

Date / Time (am / pm)

Relinquished by

Date / Time (am / pm)

Calculated by

Date / Time (am / pm)

Received by

Date / Time (am / pm)

Received at Laboratory by

Date / Time (am / pm)

Project Comments:

Rush Project

Detection Limits:

MI 84

MI 201

Other (specify)

Cooler Temperature:

42°F

Quote Number:

RECEIVED
OCT 29 2002

24 hrs 48 hrs 3 days 5 days

WHA

WHA

WHA

WHA

WHA

WHA

WHA

WHA

WHA

WHA

WHA

WHA

WHA

WHA

WHA